

# Environmental Science: Advances

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## IN THIS ISSUE

ISSN 2754-7000 CODEN ESANEB 4(7) 983–1132 (2025)



**Cover**  
See Collin P. Ward, Bryan D. James *et al.*, pp. 1014–1023. Image reproduced by permission of Collin P. Ward from *Environ. Sci.: Adv.*, 2025, 4, 1014.



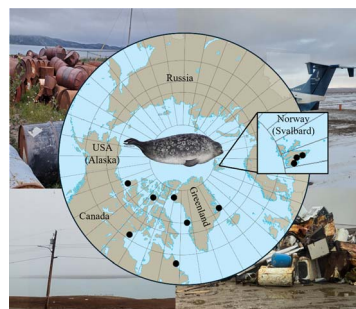
**Inside cover**  
See J. Scott McIndoe *et al.*, pp. 1024–1034. Image reproduced by permission of J. Scott McIndoe from *Environ. Sci.: Adv.*, 2025, 4, 1024.

## TUTORIAL REVIEW

990

### Do Arctic local sources of pollution influence the exposure of ringed seals (*Pusa hispida*) analyzed in contaminant monitoring programs?

Houde M.,\* Facciola N., Routti H., Vorkamp K., Søndergaard J. and Muir D. C. G.



## COMMUNICATION

1014

### Initial estimates of the lifetime of unsmoked cellulose diacetate and paper cigarette filters in the coastal ocean

Collin P. Ward,\* Christopher M. Reddy and Bryan D. James\*

**Paper or Plastic?**

Material Mass:	↑ ↓
Material Cost:	≈ ≈
Marine Lifetime:	≈ ≈
GHG Emissions:	↓ ↑
Water Usage:	↑ ↓



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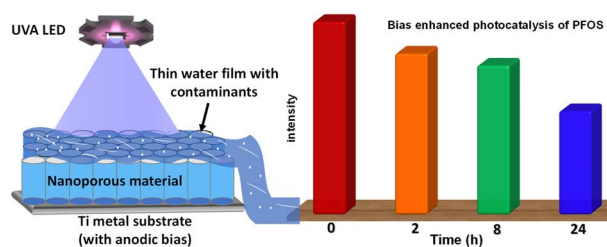
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1024

## Bias enhanced electro-photocatalysis on TiO<sub>2</sub> nanoporous materials for decomposition of forever chemicals in saltwater

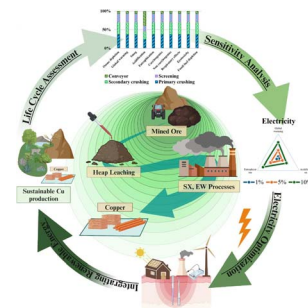
Sapanbir S. Thind, Bobby A. Ryane, John. B. Hayden, Ian Chagunda, Mathias Paul and J. Scott McIndoe\*



1035

## Sustainable copper mining: a pathway to emission reduction through renewable energy

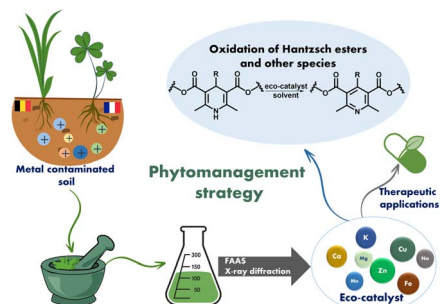
Mohsen Rabbani, Sima Nikfar, Seyedkamal Mousavinezhad, Sheida Nili, Ario Fahimi, Carl Nesbitt and Ehsan Vahidi\*



1045

## Phytomanagement strategy leads to plant-derived catalysts for the sustainable synthesis of oxidized Hantzsch esters

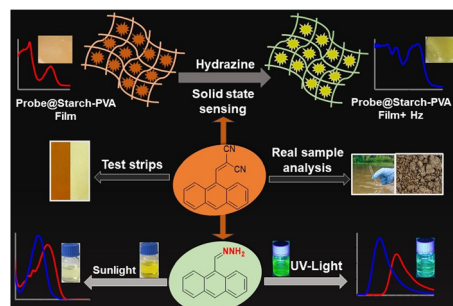
Anca-Elena Dascălu, Christophe Waterlot, Jenna Caudle, David Bulteel, Guillaume Dhainaut, Adeline Janus, Tristan Debuigne, Jean-Yves Cornu and Alina Ghinet\*



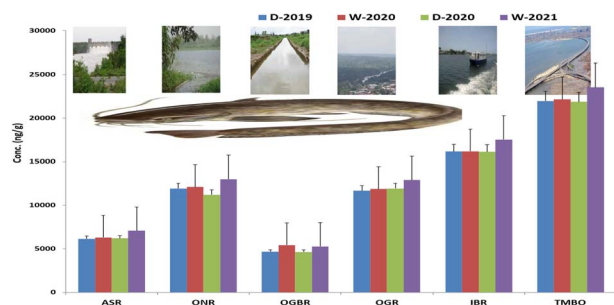
1054

## Chemodosimetric sensing of hydrazine via an irreversible reaction-based sensor and its multifunctional applications

Jhorna Borah, Arati Chetry, Anisha Pegu, Pankaj Dutta, Anupaul Baruah\* and Prithviraj Khakhary\*



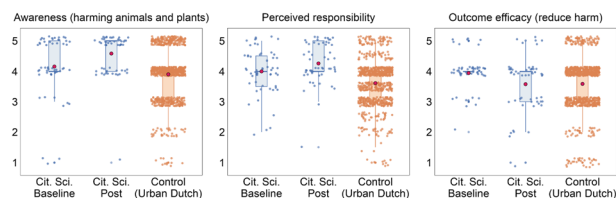
1065



### Health risk assessment of polychlorinated biphenyls in a fish species (*Clarias gariepinus*) from southwestern rivers, Nigeria

I. A. Ololade,\* A. O. Apata, O. J. Oloyede, O. I. Akindumila, O. P. Asanga and F. F. Oloye

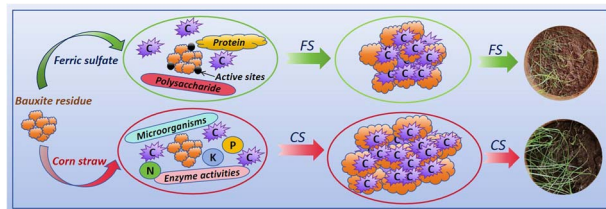
1079



### Psychological outcomes from a citizen science study on microplastics from household clothes washing

Cameron Brick,\* Anna Bosshard, Bernou Boven, Julia Hijink, Antonia Praetorius and Lies Jacobs

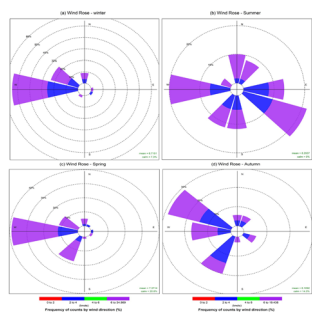
1094



### Insights into the impact of amendment effect on aggregate stability and organic carbon sequestration in bauxite residues

Tao Tian, Ruixin Feng, Chuangye Yao,\* Shaohua Feng, Xinrui Li, Le Yu and Liya Yang\*

1103



### Seasonal variations of particulate matter in two size fractions ( $PM_{2.5}$ and $PM_{10}$ ) and their relationship with meteorological parameters in Lahore, Pakistan

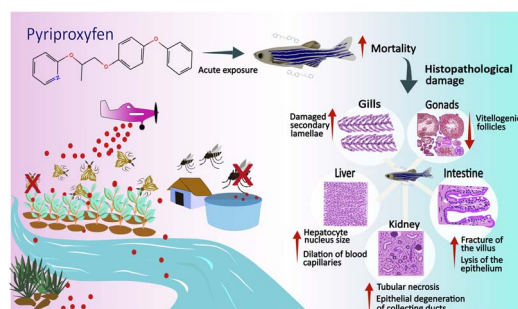
Shafiq Ahmad, Bahadar Zeb,\* Allah Ditta,\* Khan Alam, Iftikhar Ahmad and Farooq Usman



1117

## Acute toxicity and histopathological effects of pyriproxyfen in adult male and female zebrafish (*Danio rerio*)

Beatriz G. Gameiro, Rafaella S. Brito, Amanda de A. Valle, Flavio K. Tominaga, Fábio Kummrow,\* Gisele Giannocco, Dimitrius Leonardo Pitol, Nuha A. Dsouki, Rui M. de B. Maciel and Bruno F. Pereira



## CORRECTION

1129

## Correction: Air–water exchange fluxes of phthalates and phenolics xenoestrogens on Xietang River and East Taihu Lake in Suzhou and the potential health risks

Minhao Wang, Dongling Li, Ting Tong, Ziyu Zhang, Yuwei Xia, Xinhui Shi, Haifei Zhang, Kui Chen, Fang Wang, Xiaowei Tie and Lei Han\*

