

# Environmental Science Processes & Impacts

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## IN THIS ISSUE

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**Cover**  
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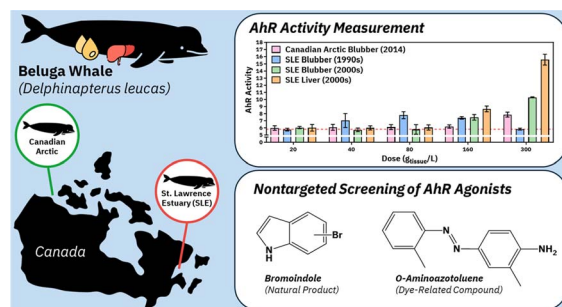
**Inside cover**  
See Yongzheng Ma, Zhiguang Niu *et al.*, pp. 1465–1475. Image reproduced by permission of Xiaofeng Li, Zhiguang Niu & Yongzheng Ma from *Environ. Sci.: Processes Impacts*, 2024, 26, 1465.

## PAPERS

1451

### Emerging investigator series: nontargeted screening of aryl hydrocarbon receptor agonists in endangered beluga whales from the St. Lawrence Estuary: beyond legacy contaminants

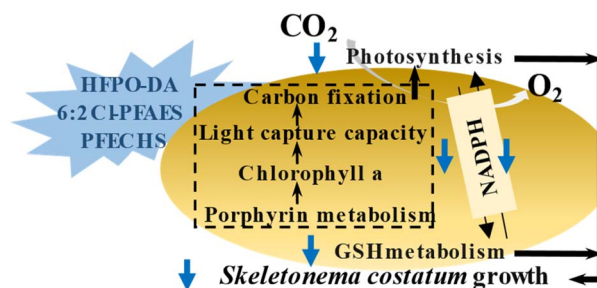
Holly Barrett, Jianxian Sun, Yuhao Chen, Diwen Yang, Jonathan Verreault, Magali Houde, Frank Wania and Hui Peng\*



1465

### Porphyrin metabolism and carbon fixation response of *Skeletonema costatum* at different growth phases to mixed emerging PFASs at environmental concentrations

Xiaofeng Li, Yongzheng Ma,\* Ying Zhang, Xiaohan Zhang, Hongyu Li, Yueling Sun and Zhiguang Niu\*



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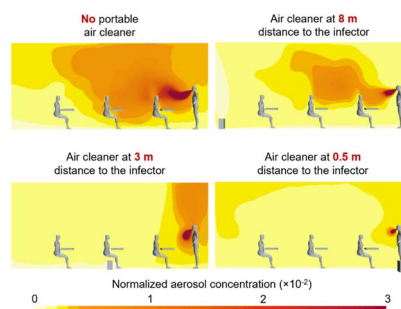




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### A CFD study on the effect of portable air cleaner placement on airborne infection control in a classroom

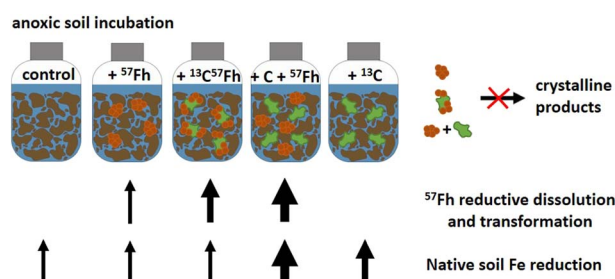
Gen Pei,\* Parham Azimi, Donghyun Rim and Joseph G. Allen



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### Emerging investigator series: Coprecipitation with glucuronic acid limits reductive dissolution and transformation of ferrihydrite in an anoxic soil

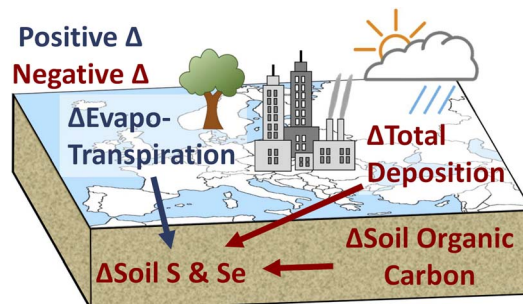
Laurel K. ThomasArrigo,\* Luiza Notini, Sophie Vontobel, Sylvain Bouchet, Tabea Nydegger and Ruben Kretzschmar



1503

### Emerging investigator series: predicted losses of sulfur and selenium in european soils using machine learning: a call for prudent model interrogation and selection

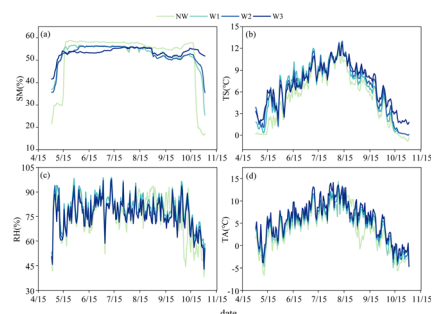
Gerrad D. Jones,\* Logan Insinga, Boris Droz, Aryeh Feinberg, Andrea Stenke, Jo Smith, Pete Smith and Lenny H. E. Winkel



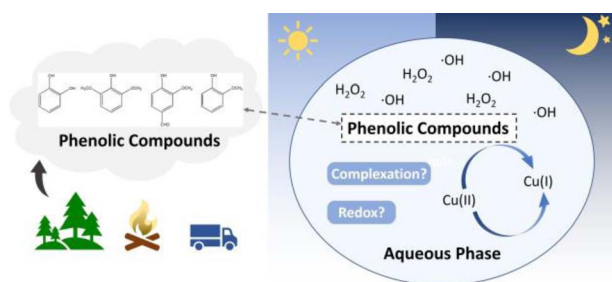
1516

### Responses of CO<sub>2</sub> and CH<sub>4</sub> in the alpine wetlands of the Tibetan Plateau to warming and nitrogen and phosphorus additions

Wenbao Zhang, Huijuan Xin, Zongxing Li,\* Qiao Cui, Bin Xu, Biao Tang, Yaning Wang, Chong Xu and Jian Xue



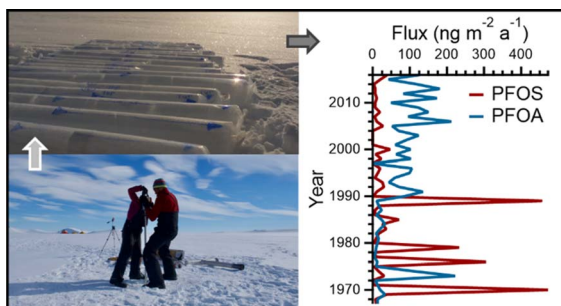
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### Effects of copper on chemical kinetics and brown carbon formation in the aqueous $\cdot OH$ oxidation of phenolic compounds

Junwei Yang, Tianye Zhou, Yuting Lyu, Beatrix Rosette Go Mabato, Jason Chun-Ho Lam, Chak K. Chan and Theodora Nah\*

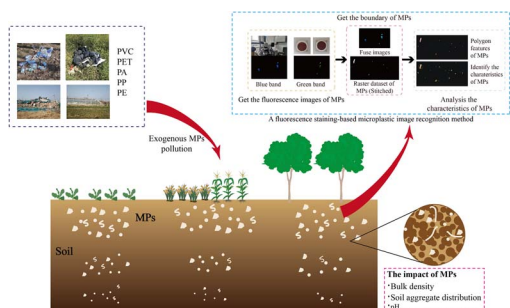
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### A 50 year record for perfluoroalkyl acids in the high arctic: implications for global and local transport

Daniel Persaud, Alison S. Criscitiello, Christine Spencer, Igor Lehnerr, Derek C. G. Muir, Amila O. De Silva\* and Cora J. Young\*

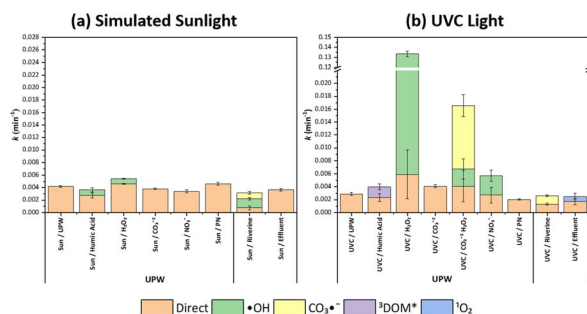
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### Distribution characteristics of soil microplastics and their impact on soil physicochemical properties in agricultural areas of the North China plain

Yuze Zhou, Ming Dou,\* Yan Zhang, Kaizi Ning and Yuxuan Li

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### Photodegradation of the main synthetic musk (HHCB) in water: kinetic study and influencing factors

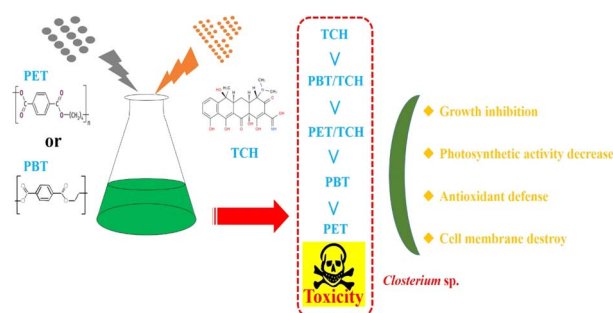
Hatice Turan, Mathieu Sebilo, Thierry Pigot and Mathilde Monperrus\*



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## Alleviating effects of microplastics together with tetracycline hydrochloride on the physiological stress of *Closterium* sp.

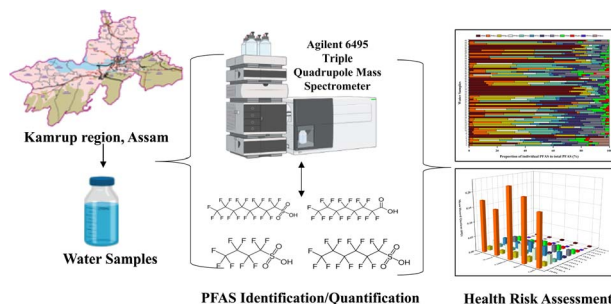
Yun Kong, Qingyun Zhou, Renjuan Wang, Qi Chen, Xiangyang Xu, Liang Zhu and Yue Wang\*



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## Comprehensive assessment of per and polyfluoroalkyl substances (PFAS) contamination in groundwater of Kamrup, Assam, India: occurrence, health risks, and metabolomic insights

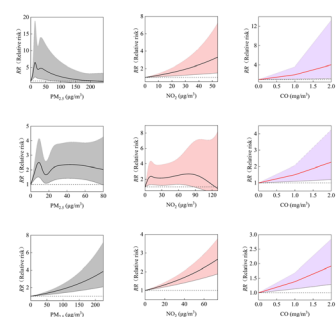
Aditya Sharma, Sachin B. Jorvekar, Sujoy Bhowmik, Purusottam Mohapatra and Roshan M. Borkar\*



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## Associations between traffic-related air pollution and allergic rhinitis outpatient visits in three cities of Gansu Province

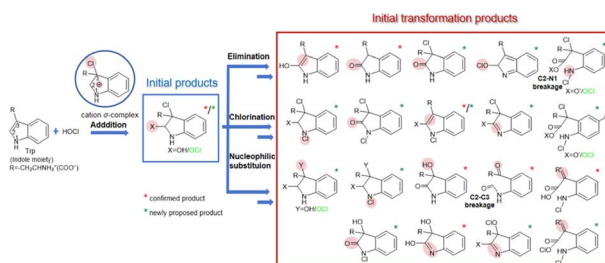
Hongran Ma, Furong Qu, Jiyuan Dong\* and Jiancheng Wang



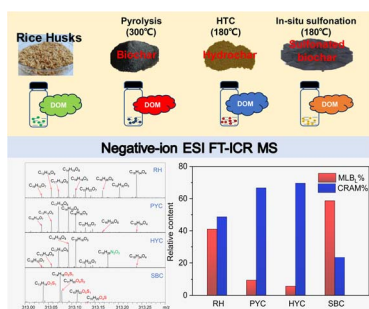
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## Identifying initial transformation products during chlorination of the indole moiety and unveiling their formation mechanisms

MengXue Huan, Yong Dong Liu\* and Rugang Zhong



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### Molecular characteristics of organic matter derived from sulfonated biochar

Zhengfeng Jiang, Chen He,\* Fei Gao, Quan Shi,\*  
Yang Chen, Haimeng Yu, Zhimao Zhou and Ruoxin Wang

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### Correction: Emerging investigator series: physicochemical properties of wildfire ash and implications for particle stability in surface waters

Mrittika Hasan Rodela, Indranil Chowdhury and Amanda K. Hohner\*

