

# Environmental Science Processes & Impacts

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## IN THIS ISSUE

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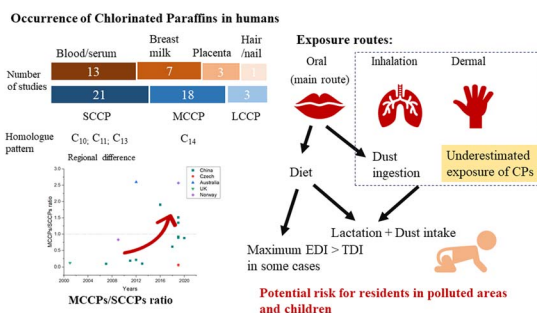
**Cover**  
See Xue Bai *et al.*, pp. 1615–1625. Image reproduced by permission of Xue Bai, Yi Liu and Menggen Kang from *Environ. Sci.: Processes Impacts*, 2023, 25, 1615.

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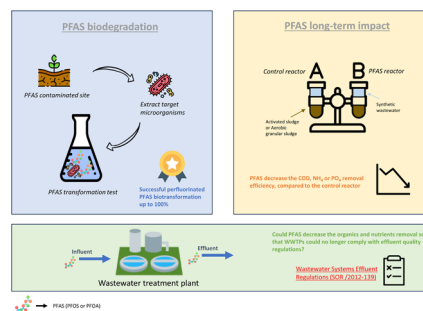
Hanyu Liao, Xue Li, Yuanyuan Zhou, Yinyin Wu, Yifei Cao, Jun Yang and Jianyun Zhang\*



1604

### Impact of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) on secondary sludge microorganisms: removal, potential toxicity, and their implications on existing wastewater treatment regulations in Canada

Zanina Ilieva, Patricia Hania, Roxana Suehring, Kimberley Gilbride and Rania Hamza\*



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# Environmental Science Processes & Impacts

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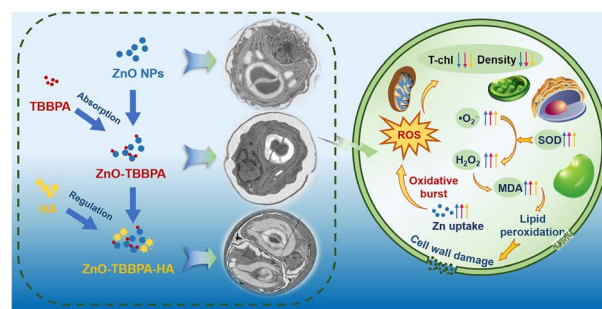
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1615

### Toxicity and tolerance mechanism of binary zinc oxide nanoparticles and tetrabromobisphenol A regulated by humic acid in *Chlorella vulgaris*

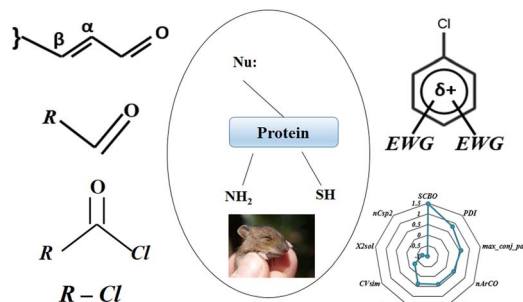
Yi Liu, Menggen Kang, Yuzhu Weng, Yuanyuan Ding and Xue Bai\*



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### Read-across-based intelligent learning: development of a global q-RASAR model for the efficient quantitative predictions of skin sensitization potential of diverse organic chemicals

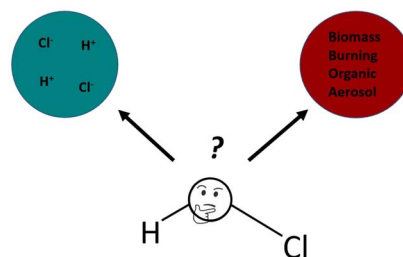
Arkaprava Banerjee and Kunal Roy\*



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### Kinetics of hypochlorous acid reactions with organic and chloride-containing tropospheric aerosol

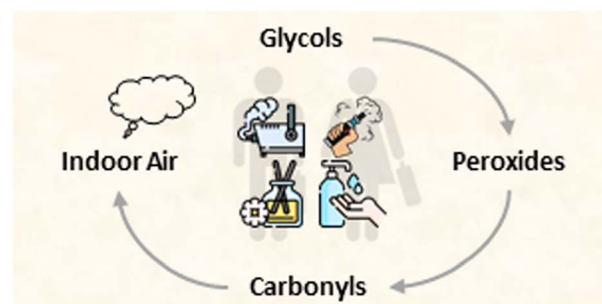
Spiro D. Jorga,\* Tengyu Liu, Yutong Wang, Sumaiya Hassan, Han Huynh and Jonathan P. D. Abbatt\*



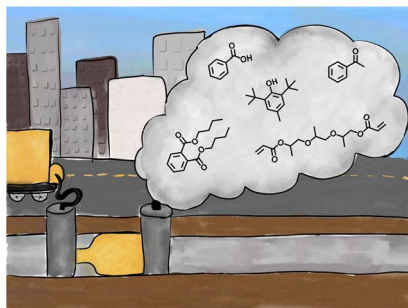
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### Autoxidation of glycols used in inhalable daily products: implications for the use of artificial fogs and e-cigarettes

Xinyang Guo, Ya-Chun Chan, Tania Gautam and Ran Zhao\*



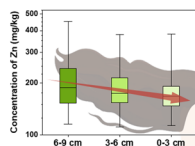
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### Diversity of organic components in airborne waste discharged from sewer pipe repairs

Ana C. Morales, Christopher P. West, Brianna N. Peterson, Yoorae Noh, Andrew J. Whelton and Alexander Laskin\*

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### Maternal hair segments reveal metal(loid) levels over the course of pregnancy: a preliminary study in Southern China

Bingqing Liu, Fengshan Cai, Bin Tang, Jialu Li, Xiao Yan,\* Dongwei Du,\* Jing Zheng, Mingzhong Ren and Yunjiang Yu

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### Identification of key photochemically produced reactive intermediates (PPRI)

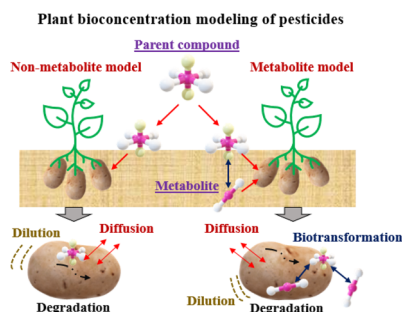
	Atorvastatin	Carbamazepine	Sulfadiazine	Benzotriazole
$^3\text{DOM}$	+++	+++	+++	+ -
$^1\text{O}_2$	+++	+++	++	++
$\cdot\text{OH}$	+	+	-	+++

+ = positive trend in one method      - = negative trend in one method  
 +++ = positive trend in all three methods      + - = positive & negative trends

### Limitations of conventional approaches to identify photochemically produced reactive intermediates involved in contaminant indirect photodegradation

Reid P. Milstead, Stephanie M. Berg, Bella M. Kelly, Christian D. Knellwolf, Cooper J. Larson, Kristine H. Wammer and Christina K. Remucal\*

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### Including the bioconcentration of pesticide metabolites in plant uptake modeling

Zijian Li\* and Peter Fantke

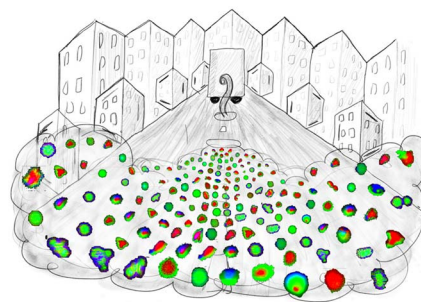


## PAPERS

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**Chemical characterization of microplastic particles formed in airborne waste discharged from sewer pipe repairs**

Brianna N. Peterson, Ana C. Morales, Jay M. Tomlin, Carrie G. W. Gorman, Peter E. Christ, Steven A. L. Sharpe, Shelby M. Huston, Felipe A. Rivera-Adorno, Brian T. O'Callahan, Matthew Fraund, Yoorae Noh, Pritee Pahari, Andrew J. Whelton, Patrick Z. El-Khoury, Ryan C. Moffet, Alla Zelenyuk and Alexander Laskin\*



## CORRECTION

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**Correction: Iodine emission from the reactive uptake of ozone to simulated seawater**

Stephanie R. Schneider, Pascale S. J. Lakey, Manabu Shiraiwa and Jonathan P. D. Abbatt\*

