

Environmental Science: Advances

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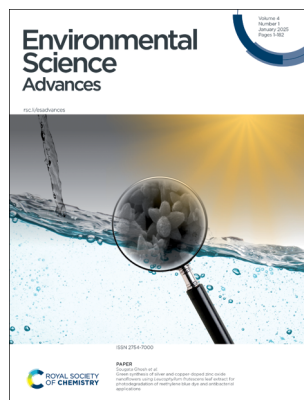
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EDITORIAL

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Environmental Science: Advances – four years of diverse and holistic visions

Kevin C. Jones, Célia Manaia and Zongwei Cai

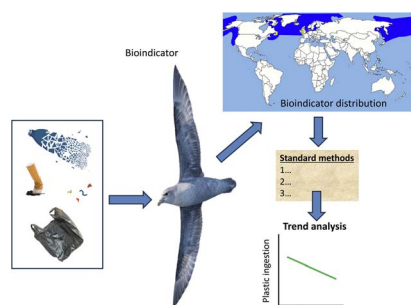


CRITICAL REVIEWS

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Monitoring plastic pollution using bioindicators: a global review and recommendations for marine environments

M. S. Savoca,* N. A. Abreo, A. H. Arias, L. Baes, M. Baini, E. Bergami, S. Brander, M. Canals, C. A. Choy, I. Corsi, B. De Witte, C. Domit, S. Dudas, E. M. Duncan, C. E. Fernández, M. C. Fossi, O. Garcés-Ordóñez, B. J. Godley, D. González-Paredes, V. G. Carman, B. M. Hamilton, B. D. Hardesty, S. H. Hong, S. Kahane-Rapport, L. M. Kashiwabara, M. B. Lacerda, G. Luna-Jorquera, C. Manno, S. E. Nelms, C. Pantì, D. J. Pérez-Venegas, C. K. Pham, J. F. Provencher, S. Purca, H. Rashid, Y. Rodríguez, C. Sparks, C. Sun, M. Thiel, C. Tsangaris and R. G. Santos



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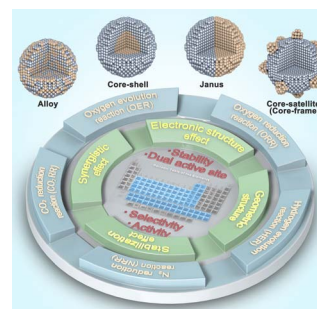
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CRITICAL REVIEWS

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Bimetallic nanoparticles: advances in fundamental investigations and catalytic applications

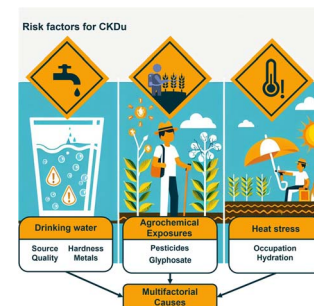
Hongxia Lin, Yuxi Liu,* Jiguang Deng, Lin Jing, Zhiwei Wang, Lu Wei, Zhen Wei, Zhiquan Hou, Jinxiong Tao and Hongxing Dai*



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A critical review of a hidden epidemic: examining the occupational and environmental risk factors of chronic kidney disease of unknown etiology (CKDu)

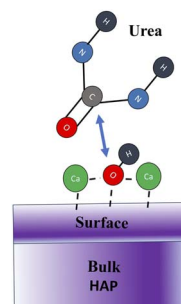
Madeleine Bradley, Danielle Land, Darrin A. Thompson and David M. Cwiertny*



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Hydroxyapatite/urea hybrid materials: what is the basis for the enhanced nutrient efficiency?

Mohamed Ammar, Sherif Ashraf and Jonas Baltrusaitis*

**Urea-HAP interactions:**

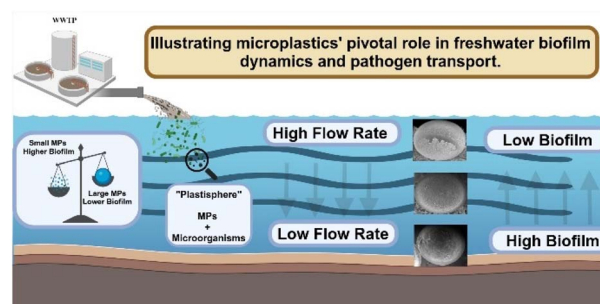
- bulk crystalline changes
- spectral shifts
- thermal stability
- slower N release kinetics

COMMUNICATION

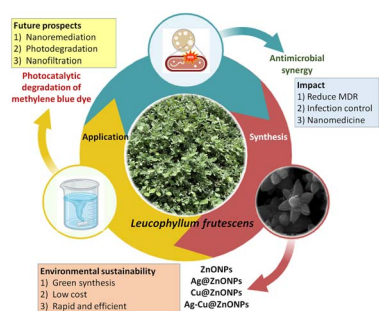
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Wastewater-induced microplastic biofouling in freshwater: role of particle size and flow velocity

Gaurav Bhardwaj, Malihe Mohammadiun, Carlos Saul Osorio Gonzalez, Satinder Kaur Brar and Shooka Karimpour*



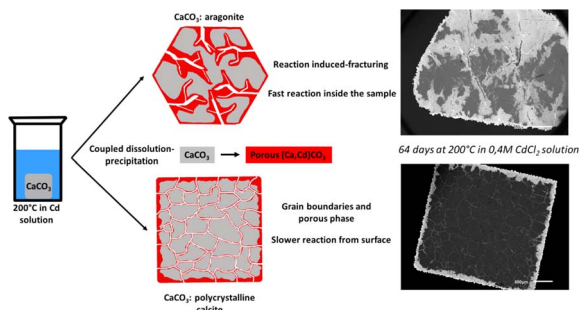
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Green synthesis of silver and copper-doped zinc oxide nanoflowers using *Leucophyllum frutescens* leaf extract for photodegradation of methylene blue dye and antibacterial applications

Maitri Nandasana, Tanawat Imboon, Rashbihari Layek, Arindam Dey, Pranav Pandya, Vijay Singh Parihar, Madhumita S. Tawre, Santosh Sutar, Pathik Kumbhakar, Karishma Pardesi, Sirikanjana Thongmee and Sougata Ghosh*

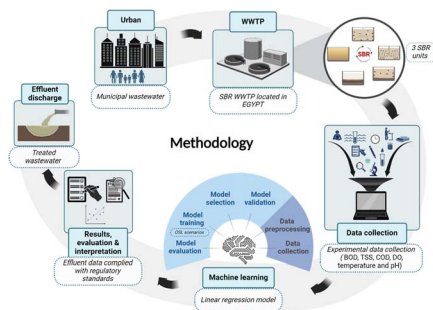
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Porosity and fluid pathway development during cadmium sequestration by calcium carbonate replacement

Maude Julia,* Christine V. Putnis, Oliver Plümer and François Renard

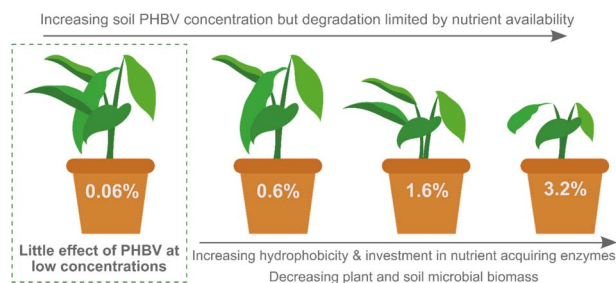
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Machine learning application in municipal wastewater treatment to enhance the performance of a sequencing batch reactor wastewater treatment plant

Hagar H. Hassan*

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Microbial degradation of bioplastic (PHBV) is limited by nutrient availability at high microplastic loadings

Michaela K. Reay,* Martine Graf, Lucy M. Greenfield, Rafael Bargiela, Charles Onyije, Charlotte E. M. Lloyd, Ian D. Bull, Richard P. Evershed, Peter N. Golyshin, David R. Chadwick and Davey L. Jones

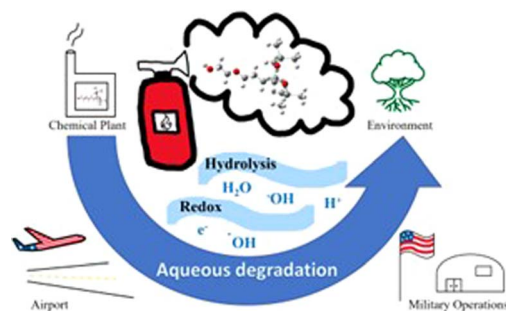


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Aqueous solution degradation pathways of trimethylsiloxane surfactants

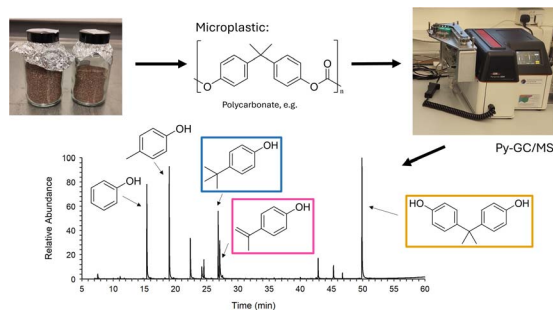
Maleigh Mifkovic, Brian D. Etz, Manoj K. Shukla* and Shubham Vyas*



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Quantification of microplastic targets in environmental matrices using pyrolysis-gas chromatography-mass spectrometry

Rebecca H. Peel, Charlotte E. M. Lloyd, Stephen J. Roberts, B. D. A. Naafs and Ian D. Bull*



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Atmospheric mercury concentration variations at Syowa Station, Lützow-Holm Bay, East Antarctica and contributing factors

Koyomi Nakazawa,* Osamu Nagafuchi,* Akihiro Mitsui, Tomoaki Watanabe, Naoko Hishida, Megumu Tsujimoto and Satoshi Imura

