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Environmental Science: Advances

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See Francesco Granata *et al.*, pp. 1537–1551. Image reproduced by permission of Francesco Granata from *Environ. Sci.: Adv.*, 2024, **3**, 1537.

CRITICAL REVIEWS

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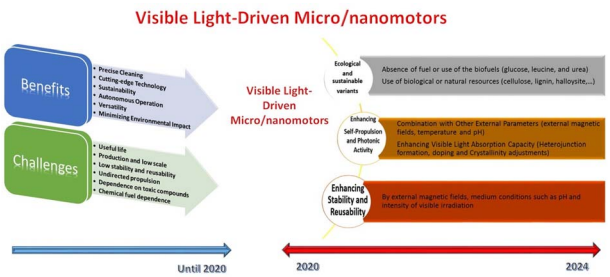
Advancements in visible light-driven micro/nanomotors for photodegradation of environmental pollutants

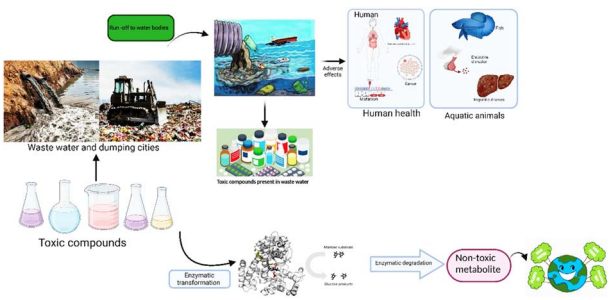
Vanessa R. Ferreira and Manuel Azenha*



1500

Laccase-mediated degradation of emerging contaminants: unveiling a sustainable solution

Pooja Thathola,* Elda M. Melchor-Martínez, Priyanka Adhikari, Saúl Antonio Hernández Martínez, Anita Pandey and Roberto Parra-Saldívar



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PERSPECTIVE

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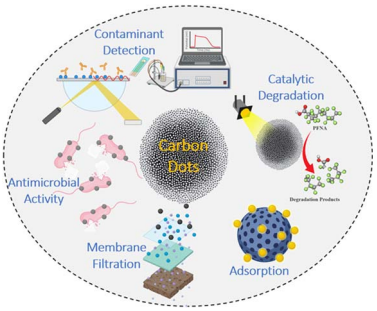
Carbon dots: a promising path towards environmental sustainability

Ajith Manayil Parambil* and Paulraj Rajamani*



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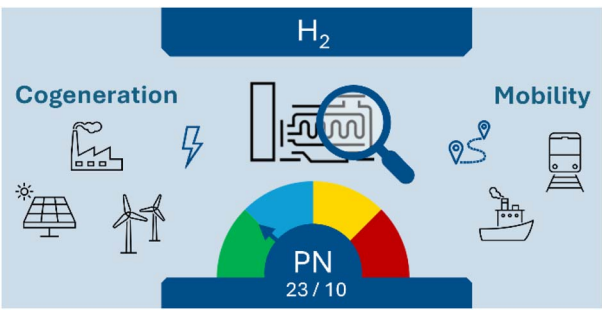
1524

Investigations on particle emissions of large-bore engines powered by natural gas and hydrogen

Felina Armbruster,* Alexander Gelner, Andreas Zepf, Maximilian Prager, Martin Härtl and Malte Jaensch



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Dissolved oxygen forecasting in the Mississippi River: advanced ensemble machine learning models

Francesco Granata,* Senlin Zhu and Fabio Di Nunno

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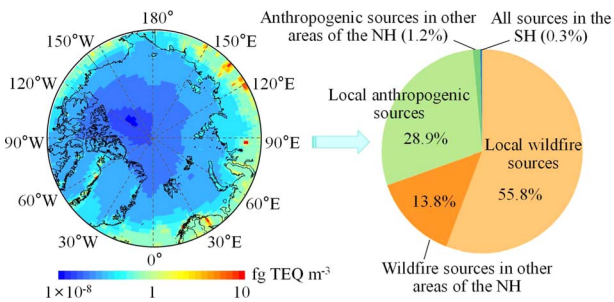
Dioxins in the Arctic: local sources *vs.* long-range transport

Ling Gou, Shijie Song, Tao Huang,* Zaili Ling, Kaijie Chen, Jiayi Xin, Enze Geng, Jiaxin Wang, Yuan Zhao, Hong Gao and Jianmin Ma



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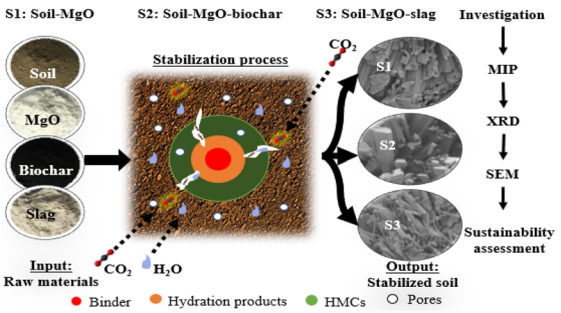

Impacts of biochar and slag on carbon sequestration potential and sustainability assessment of MgO-stabilized marine soils: insights from MIP analysis

Chikezie Chimere Onyekwena, Qi Li,* Yong Wang, Ishrat Hameed Alvi, Yunlu Hou, Chima Finnian Ukaomah and Theogene Hakuzweyezu

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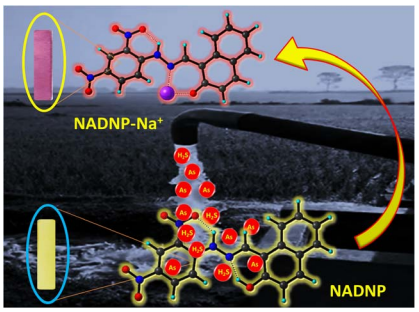

Naked eye detection of arsenite, arsenate, and H_2S by a Schiff base naphthaldehyde conjugate using a single paper strip, based on a deprotonation mechanism

Diptiman De, Priyotosh Ghosh, Sriman De and Prithidipa Sahoo*

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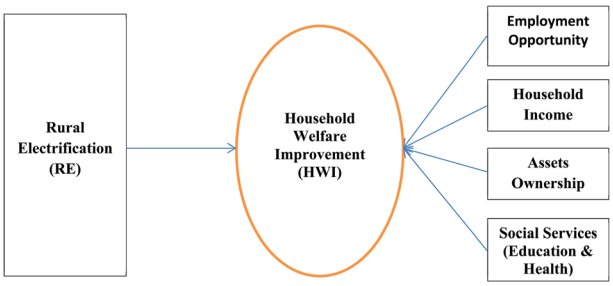

Household welfare improvement in the Mbulu district of Tanzania: does rural electrification matter?

Hadija Matimbwa and Marco E. Mng'ong'o*

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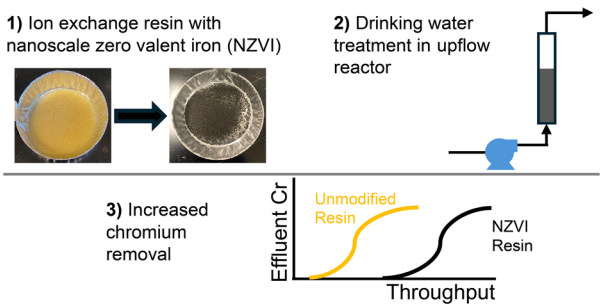

A hybrid anion exchanger with nanoscale zero valent iron for trace hexavalent chromium removal from drinking water

Annabel L. Mungan, Elizabeth A. Hjelvik, Anthony P. Straub and Julie A. Korak*

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PAPERS

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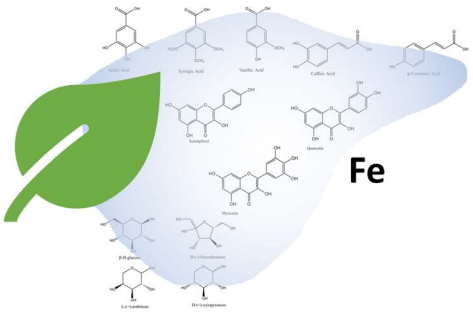
Iron complexation by biomass model compounds

Anurag S. Mandalika and Troy M. Runge*



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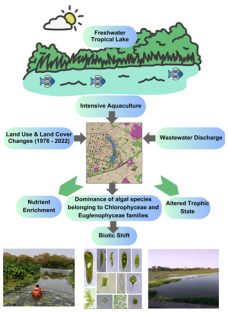
Intensive aquaculture affects lake's trophic status and aquatic floral diversity

Divya Dubey,* Kiran Toppo, Saroj Kumar and Venkatesh Dutta*