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Volume 45, Issue 17

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About the Cover:

Dual Features vie for position on this issue's cover. McCarty, Bae, and Kim explore how newer wastewater processes present an opportunity for wastewater as a resource to become a contributing net energy generator. Grant and Marusic describe turbulence and interfacial flux in environmental flows, providing context and motivation for new correlations aimed to improve modeling predictions across a variety of environmental settings. [View first article](#), [View second article](#).

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Jerald L. Schnoor

p 7099

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Domestic Wastewater Treatment as a Net Energy Producer—Can This be Achieved?

Perry L. McCarty, Jaeho Bae, and Jeonghwan Kim

pp 7100-7106

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DOI: 10.1021/es2014264

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Stanley B. Grant and Ivan Marusic

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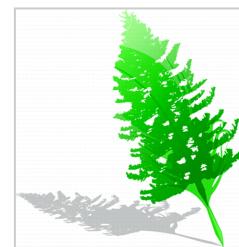


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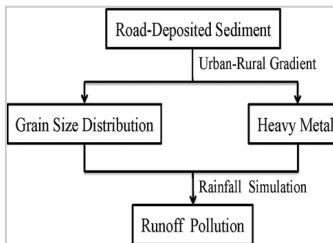


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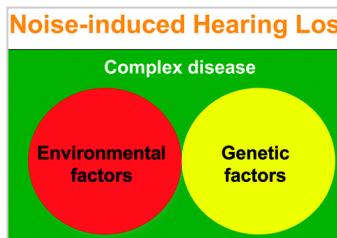


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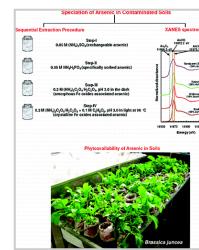


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**Characterization of Residential Wood Combustion Particles Using the Two-Wavelength Aethalometer**

Yungang Wang, Philip K. Hopke, Oliver V. Rattigan, Xiaoyan Xia, David C. Chalupa, and Mark J. Utell

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**Phylogenetic Diversity and Metabolic Potential of Activated Sludge Microbial Communities in**[Abstract](#) | [Supporting Info](#)

Full-Scale Wastewater Treatment Plants

Chao Yang, Wei Zhang, Ruihua Liu, Qiang Li, Baobin Li, Shufang Wang, Cunjiang Song, Chuanling Qiao, and Ashok Mulchandani
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Sequential Extraction Study of Stability of Adsorbed Mercury in Chemically Modified Activated Carbons

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Influence of Ferric Iron on Complete Dechlorination of Trichloroethylene (TCE) to Ethene: Fe (III) Reduction Does Not Always Inhibit Complete Dechlorination

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Structure-Reactivity of Naphthenic Acids in the Ozonation Process

Leónidas A. Pérez-Estrada, Xiumei Han, Przemysław Drzewicz, Mohamed Gamal El-Din, Phillip M. Fedorak, and Jonathan W. Martin
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Sustainability Engineering and Green Chemistry

What Is the Most Environmentally Beneficial Way to Treat Commercial Food Waste?

James W. Levis and Morton A. Barlaz

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Christian Vogel and Christian Adam

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Sally Brown, Kate Kurtz, Andy Bary, and Craig Cogger

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[Abstract](#) | [Supporting Info](#)[!\[\]\(b00c20aa08d6997b52c25a07e0d67de8_img.jpg\) Full Text HTML](#)[!\[\]\(d51749a6f42145688a1f6cace38d976c_img.jpg\) Hi-Res PDF \[2202K\]](#)[!\[\]\(ddb2ab9e725cf7bab2c651ee48e42d53_img.jpg\) PDF w/ Links \[792K\]](#)[!\[\]\(1e4ec1f961a139716112f365da21ae86_img.jpg\) Subscriber Access](#)**Quantitative Risk-Based Approach for Improving Water Quality Management in Mining**

Wenying Liu, Chris J. Moran, and Sue Vink

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Publication Date (Web): July 28, 2011 (Article)

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Ecotoxicology and Human Environmental Health

Trans-Placental Transfer of Thirteen Perfluorinated Compounds and Relations with Fetal Thyroid Hormones

Sunmi Kim, Kyungho Choi, Kyunghee Ji, Jihyeon Seo, Younglim Kho, Jeongim Park, Sungkyoon Kim, Seokhwan Park, Incheol Hwang, Jongkwan Jeon, Hyeran Yang, and John P. Giesy

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Integrating Silicon Nanowire Field Effect Transistor, Microfluidics and Air Sampling Techniques For Real-Time Monitoring Biological Aerosols

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Genotoxicity and Endocrine-Disruption Potentials of Sediment near an Oil Spill Site: Two Years after the Hebei Spirit Oil Spill

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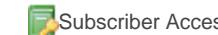
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Zebrafish Eleutheroembryos Provide a Suitable Vertebrate Model for Screening Chemicals that Impair Thyroid Hormone Synthesis

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Biogenic Fe(III) Minerals Lower the Efficiency of Iron-Mineral-Based Commercial Filter Systems for Arsenic Removal

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Nanosilver in Consumer Products and Human Health: More Information Required!

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Batstone D.J., Pavlostathis S.G., Jensen P.D., and Angelidaki I.

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Caren C. Helbing, Ph.D. , Jeremy E. Wulff, Ph.D. , Caleb M. Bromba , Ashley Hinther, M.Sc. , Nik Veldhoen, Ph.

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Correction to Characterization Factors for Thermal Pollution in Freshwater Aquatic Environments

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Copper Stabilization via Spinel Formation during the Sintering of Simulated Copper-Laden Sludge with Aluminum-Rich Ceramic Precursors

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