

- [Blogs](#)
- [Submission & Review](#)
 - [Overview](#)
 - [ACS Paragon Plus Environment](#)
 - [Ethical Guidelines \[PDF\]](#)
 - [ACS Style Guide: Citing References \[PDF\]](#)
 - [Copyright & Permissions/Rightslink](#)
 - [ACS Author & Reviewer Resource Center](#)
- [Subscriptions](#)
- [About the Journal](#)
 - [About the Journal](#)
 - [Editors](#)
 - [Editor Profile](#)
 - [News & Features Staff](#)
 - [Masthead \[PDF\]](#)
 - [Advertising](#)

[Previous Issue](#) [Next Issue](#)

Table of Contents



[Larger Cover](#)

May 1, 2009
Volume 43, Issue 9
Pages 2993-3402

In this issue:

- [Letters](#)
- [Comment](#)
- [Environmental News](#)

- [Features](#)
- [Critical Reviews](#)
- [Policy Analysis](#)
- [Characterization of Natural and Affected Environments](#)
- [Environmental Processes](#)
- [Environmental Modeling](#)
- [Environmental Measurements Methods](#)
- [Remediation and Control Technologies](#)
- [Sustainability Engineering and Green Chemistry](#)
- [Ecotoxicology and Human Environmental Health](#)
- [Energy and the Environment](#)
- [Correspondence](#)
- [Additions and Corrections](#)

About the Cover:

A great deal of hype has surrounded implementation of federally mandated measures to grow crops such as corn for production of ethanol (biofuel). Yet how much water will be needed to meet the legislated demand? Further, will this mandate make an already troubling Gulf of Mexico hypoxic zone worse? Read Alvarez et al.'s Feature to decide if it's "Drink or Drive". Cover illustration by Scott Roberts. [View the article.](#)



ACS AuthorChoice indicates the article is freely available through sponsorship by the author or related funding agency. [More about this program.](#)

Select All For Selected Content:

Letters

[Is atrazine a potent endocrine disruptor chemical?](#)

Keith R. Solomon



p 2993

Publication Date (Web): April 29, 2009 (Letter)

DOI: 10.1021/es900495z

[Abstract](#)

-  [Full Text HTML](#)

-  [Hi-Res PDF](#)[36K]
-  [PDF w/ Links](#)[37K]

[Response from Collins](#)




Terrence J. Collins

p 2994

Publication Date (Web): April 29, 2009 (Letter)

DOI: 10.1021/es900729k

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[39K]
-  [PDF w/ Links](#)[40K]

[Landfill gas recovery](#)




Morton A. Barlaz

p 2995

Publication Date (Web): April 29, 2009 (Letter)

DOI: 10.1021/es9004174

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[34K]
-  [PDF w/ Links](#)[34K]




[Lead in D.C. water](#)

Tee L. Guidotti

Publication Date (Web): March 23, 2009 (Letter)

DOI: 10.1021/es900484d

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[38K]
-  [PDF w/ Links](#)[39K]

Comment




[LCA and Environmental Intelligence?](#)

Jerald L. Schnoor

Publication Date (Web): April 10, 2009 (Comment)

DOI: 10.1021/es900867c

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[49K]
-  [PDF w/ Links](#)[65K]



Sponsored Access

Environmental News

[CSI-style tools offer clues about flame retardants in dust](#)

Kellyn Betts

Publication Date (Web): March 18, 2009 (Environmental News)

DOI: 10.1021/es900669w

[Abstract](#)

-  [Full Text HTML](#)

-  [Hi-Res PDF](#)[966K]
-  [PDF w/ Links](#)[82K]

 Sponsored Access




[Energy efficiency and the smart grid](#)

Noreen Parks

Publication Date (Web): March 25, 2009 (Environmental News)

DOI: 10.1021/es900771j

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[728K]
-  [PDF w/ Links](#)[100K]

 Sponsored Access




[Dueling priorities](#) [renewable energy vs environmental assessment](#)

Janet Pelley

Publication Date (Web): March 25, 2009 (Environmental News)

DOI: 10.1021/es900685s

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1985K]
-  [PDF w/ Links](#)[101K]

 Sponsored Access




[Coal-ash spills highlight ongoing risk to ecosystems](#)

Rhithu Chatterjee

Publication Date (Web): March 25, 2009 (Environmental News)

DOI: 10.1021/es9006977

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[4147K]
-  [PDF w/ Links](#)[156K]

 Sponsored Access

Features

[The Water Footprint of Biofuels: A Drink or Drive Issue?](#)




R. Dominguez-Faus, Susan E. Powers, Joel G. Burken, Pedro J. Alvarez

pp 3005–3010

Publication Date (Web): May 1, 2009 (Feature)

DOI: 10.1021/es802162x

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[813K]
-  [PDF w/ Links](#)[265K]

 Sponsored Access

Critical Reviews




[Pretreatment for Low Pressure Membranes in Water Treatment: A Review](#)

Haiou Huang, Kellogg Schwab and Joseph G. Jacangelo

Publication Date (Web): April 7, 2009 (Critical Review)

DOI: 10.1021/es802473r

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[563K]
-  [PDF w/ Links](#)[166K]




[A Review of Methods for the Determination of Reduced Sulfur Compounds \(RSCs\) in Air](#)

Sudhir Kumar Pandey and Ki-Hyun Kim

Publication Date (Web): April 3, 2009 (Critical Review)

DOI: 10.1021/es803272f

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[176K]
-  [PDF w/ Links](#)[144K]

Policy Analysis

[The Impact of Toxicity Testing Costs on Nanomaterial Regulation](#)

Jae-Young Choi, Gurumurthy Ramachandran and Milind Kandlikar

Publication Date (Web): February 20, 2009 (Policy Analysis)

DOI: 10.1021/es802388s

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)

-  [Hi-Res PDF](#)[78K]
-  [PDF w/ Links](#)[78K]

 Sponsored Access




[Regulating Geologic Sequestration in the United States: Early Rules Take Divergent Approaches](#)

Melisa F. Pollak and Elizabeth J. Wilson

Publication Date (Web): March 30, 2009 (Policy Analysis)

DOI: 10.1021/es803094f

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[99K]
-  [PDF w/ Links](#)[100K]

 Sponsored Access

Characterization of Natural and Affected Environments




[Polybrominated Diphenyl Ethers in Human Gestational Membranes from Women in Southeast Michigan](#)

Mark F. Miller, Sergei M. Chernyak, Stuart Batterman and Rita Loch-Carusio

Publication Date (Web): April 6, 2009 (Article)

DOI: 10.1021/es8032764

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[194K]
-  [PDF w/ Links](#)[128K]




Microbial Community Structure and Biodegradation Activity of Particle-Associated Bacteria in a Coal Tar Contaminated Creek

Jennifer M. DeBruyn and Gary S. Sayler

Publication Date (Web): March 27, 2009 (Article)

DOI: 10.1021/es803373y

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[776K]
-  [PDF w/ Links](#)[241K]




Semivolatile Organic Compounds in Residential Air along the Arizona–Mexico Border

Robert W. Gale, Walter L. Cranor, David A. Alvarez, James N. Huckins, Jimmie D. Petty and Gary L. Robertson

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es803482u

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[308K]
-  [PDF w/ Links](#)[166K]




Particulate Nitrate Formation in a Highly Polluted Urban Area: A Case Study by Single-Particle Mass Spectrometry in Shanghai

Xiaofei Wang, Yaping Zhang, Hong Chen, Xin Yang and Jianmin Chen, Fuhai Geng

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es8020155

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[579K]
-  [PDF w/ Links](#)[252K]




Identifying Transfer Mechanisms and Sources of Decabromodiphenyl Ether (BDE 209) in Indoor Environments Using Environmental Forensic Microscopy

Thomas F. Webster, Stuart Harrad, James R. Millette, R. David Holbrook, Jeffrey M. Davis, Heather M. Stapleton, Joseph G. Allen, Michael D. McClean, Catalina Ibarra, Mohamed Abou-Elwafa Abdallah and Adrian Covaci

Publication Date (Web): March 18, 2009 (Article)

DOI: 10.1021/es803139w

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3247K]
-  [PDF w/ Links](#)[318K]




Occurrence and Fate of 1-Chloro-2,2-bis(4-chlorophenyl)ethene in the Environment of the Pearl River Delta, South China

Ying Guo, Bao-Zhong Zhang, Xiang-Zhou Meng, Huan-Yun Yu, Yong Ran, Shao-Meng Li and Eddy Y. Zeng

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es803294w

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2918K]
-  [PDF w/ Links](#)[250K]




[Identification and Evaluation of a Novel Heterocyclic Brominated Flame Retardant Tris\(2,3-dibromopropyl\) Isocyanurate in Environmental Matrices near a Manufacturing Plant in Southern China](#)

Ting Ruan, Yawei Wang, Chang Wang, Pu Wang, Jianjie Fu, Yongguang Yin, Guangbo Qu, Thanh Wang and Guibin Jiang

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es803397x

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1360K]
-  [PDF w/ Links](#)[227K]

Environmental Processes

[Occurrence and Fate of Nitrosamines and Their Precursors in Municipal Sludge and Anaerobic Digestion Systems](#)

Lokesh Padhye, Ulas Tezel, William A. Mitch, Spyros G. Pavlostathis and Ching-Hua Huang

Publication Date (Web): March 25, 2009 (Article)

DOI: 10.1021/es803067p

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[794K]

-  [PDF w/ Links](#)[202K]




[LFERs for Soil Organic Carbon–Water Distribution Coefficients \(\$K_{OC}\$ \) at Environmentally Relevant Sorbate Concentrations](#)

Satoshi Endo, Peter Grathwohl, Stefan B. Haderlein and Torsten C. Schmidt
pp 3094–3100

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es803157e

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[923K]
-  [PDF w/ Links](#)[237K]




[Light-Source-Dependent Effects of Main Water Constituents on Photodegradation of Phenicol Antibiotics: Mechanism and Kinetics](#)

Linke Ge, Jingwen Chen, Xianliang Qiao, Jing Lin and Xiyun Cai

Publication Date (Web): March 30, 2009 (Article)

DOI: 10.1021/es8031727

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1553K]
-  [PDF w/ Links](#)[285K]

[Using Oxygen Isotopes of Phosphate To Trace Phosphorus](#)




Sources and Cycling in Lake Erie

Katy E. Elsbury, Adina Paytan, Nathaniel E. Ostrom, Carol Kendall, Megan B. Young, Karen McLaughlin, Mark E. Rollog and Sue Watson

Publication Date (Web): March 27, 2009 (Article)

DOI: 10.1021/es8034126

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1858K]
-  [PDF w/ Links](#)[268K]




Eu(III) Sorption to TiO₂ (Anatase and Rutile): Batch, XPS, and EXAFS Studies

Xiaoli Tan, Qiaohui Fan, Xiangke Wang and Bernd Grambow

Publication Date (Web): March 24, 2009 (Article)

DOI: 10.1021/es803431c

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2184K]
-  [PDF w/ Links](#)[341K]

Longitudinal and Latitudinal Distribution of Perfluoroalkyl Compounds in the Surface Water of the Atlantic Ocean




Lutz Ahrens, Jonathan L. Barber, Zhiyong Xie and Ralf Ebinghaus

pp 3122–3127

Publication Date (Web): March 30, 2009 (Article)

DOI: 10.1021/es803507p

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1948K]
-  [PDF w/ Links](#)[214K]




[Iron-Monosulfide Oxidation in Natural Sediments: Resolving Microbially Mediated S Transformations Using XANES, Electron Microscopy, and Selective Extractions](#)

E. D. Burton, R. T. Bush, L. A. Sullivan, R. K. Hocking, D. R. G. Mitchell, S. G. Johnston, R. W. Fitzpatrick, M. Raven, S. McClure and L.Y. Jang

Publication Date (Web): April 1, 2009 (Article)

DOI: 10.1021/es8036548

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1978K]
-  [PDF w/ Links](#)[343K]




[Fate of the Antibiotic Sulfamethoxazole and Its Two Major Human Metabolites in a Water Sediment Test](#)

Michael Radke, Christoph Lauwigi, Georg Heinkele, Thomas E. Mürdter and Marion Letzel

Publication Date (Web): April 6, 2009 (Article)

DOI: 10.1021/es900300u

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[510K]
-  [PDF w/ Links](#)[192K]




ATR-FTIR Studies on the Nature of Surface Complexes and Desorption Efficiency of *p*-Arsanilic Acid on Iron (Oxyhydr) oxides

Matthew Chabot, Tuan Hoang and Hind A. Al-Abadleh

Publication Date (Web): April 3, 2009 (Article)

DOI: 10.1021/es803178f

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[577K]
-  [PDF w/ Links](#)[238K]




Sunlight Nitrate-Induced Photodegradation of Chlorotoluron: Evidence of the Process in Aquatic Mesocosms

Sylvie Nélieu, François Perreau, Frédérique Bonnemoy, Martine Ollitrault, Didier Azam, Laurent Lagadic, Jacques Bohatier and Jacques Einhorn

Publication Date (Web): March 30, 2009 (Article)

DOI: 10.1021/es8033439

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[454K]
-  [PDF w/ Links](#)[202K]

Stable Isotope Fractionation of γ -Hexachlorocyclohexane (Lindane) during Reductive Dechlorination by Two Strains of




Sulfate-Reducing Bacteria

Silviu-Laurentiu Badea, Carsten Vogt, Stefanie Weber, Andrei-Florin Danet and Hans-Hermann Richnow

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es801284m

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[407K]
-  [PDF w/ Links](#)[178K]

White-Rot Basidiomycete-Mediated Decomposition of C₆₀




Fullerol

Kathryn M. Schreiner, Timothy R. Filley, Robert A. Blanchette, Brenda Beitler Bowen, Robert D. Bolskar, William C. Hockaday, Caroline A. Masiello and James W. Raebiger

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es801873q

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[325K]
-  [PDF w/ Links](#)[179K]




Biodegradation of Haloacetic Acids by Bacterial Isolates and Enrichment Cultures from Drinking Water Systems

Ping Zhang, Timothy M. LaPara, Emma H. Goslan, Yuefeng Xie, Simon A. Parsons and Raymond M. Hozalski

Publication Date (Web): April 1, 2009 (Article)

DOI: 10.1021/es802990e

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[201K]
-  [PDF w/ Links](#)[148K]




[Influence of Solution Chemistry on the Deposition and Detachment Kinetics of a CdTe Quantum Dot Examined Using a Quartz Crystal Microbalance](#)

Ivan R. Quevedo and Nathalie Tufenkji

Publication Date (Web): March 27, 2009 (Article)

DOI: 10.1021/es803388u

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2972K]
-  [PDF w/ Links](#)[187K]




[An Elemental Mercury Diffusion Coefficient for Natural Waters Determined by Molecular Dynamics Simulation](#)

Joachim Kuss, Jörg Holzmann and Ralf Ludwig

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es8034889

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[181K]
-  [PDF w/ Links](#)[134K]




Effects of Native Organic Material and Water on Sorption Properties of Reference Diesel Soot

Satoshi Endo, Peter Grathwohl, Stefan B. Haderlein and Torsten C. Schmidt
pp 3187–3193

Publication Date (Web): March 24, 2009 (Article)

DOI: 10.1021/es803519a

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[546K]
-  [PDF w/ Links](#)[217K]




Sampling Natural Biofilms: A New Route to Build Efficient Microbial Anodes

Benjamin Erable, Marie-Anne Roncato, Wafa Achouak and Alain Bergel

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es803549v

[Abstract](#)




-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2666K]
-  [PDF w/ Links](#)[185K]

Environmental Modeling

Mechanistic Model for the Reclamation of Industrial Wastewaters Using Algal–Bacterial Photobioreactors

Sergio Bordel, Benoit Guieysse and Raul Muñoz
Publication Date (Web): March 24, 2009 (Article)
DOI: 10.1021/es802156e




[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[232K]
-  [PDF w/ Links](#)[156K]

[Three-Dimensional Modeling of HCFC-123 in the Atmosphere: Assessing Its Potential Environmental Impacts and Rationale for Continued Use](#)

Donald J. Wuebbles and Kenneth O. Patten
Publication Date (Web): March 31, 2009 (Article)
DOI: 10.1021/es802308m




[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[760K]
-  [PDF w/ Links](#)[183K]

[Model-Based Evaluation of Reduction Strategies for Micropollutants from Wastewater Treatment Plants in Complex River Networks](#)

Christoph Ort, Juliane Hollender, Michael Schaerer and Hansruedi Siegrist
Publication Date (Web): March 23, 2009 (Article)
DOI: 10.1021/es802286v

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3198K]
-  [PDF w/ Links](#)[398K]




[Ability of the MACRO Model to Predict Long-Term Leaching of Metribuzin and Diketometribuzin](#)

Annette E. Rosenbom, Jeanne Kjær, Trine Henriksen, Marlene Ullum and Preben Olsen

Publication Date (Web): March 25, 2009 (Article)

DOI: 10.1021/es802752x

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[242K]
-  [PDF w/ Links](#)[273K]

Environmental Measurements Methods




[Use of Depuration Compounds in Passive Air Samplers: Results from Active Sampling-Supported Field Deployment, Potential Uses, and Recommendations](#)

Claudia Moeckel, Tom Harner, Luca Nizzetto, Bo Strandberg, Anders Lindroth and Kevin C. Jones

Publication Date (Web): March 20, 2009 (Article)

DOI: 10.1021/es802897x

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1156K]
-  [PDF w/ Links](#)[237K]




[Rapid Detection and Quantification of *Aspergillus fumigatus* in Environmental Air Samples Using Solid-Phase Cytometry](#)

Lies M. E. Vanhee, Hans J. Nelis and Tom Coenye

Publication Date (Web): March 27, 2009 (Article)

DOI: 10.1021/es803435a

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1310K]
-  [PDF w/ Links](#)[224K]




[Capabilities of Direct Sample Introduction—Comprehensive Two-Dimensional Gas Chromatography—Time-of-Flight Mass Spectrometry to Analyze Organic Chemicals of Interest in Fish Oils](#)

Eunha Hoh, Steven J. Lehotay, Katerina Mastovska, Helen L. Ngo, Walter Vetter, Kristin C. Pangallo and Christopher M. Reddy

Publication Date (Web): April 2, 2009 (Article)

DOI: 10.1021/es803486x

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1575K]
-  [PDF w/ Links](#)[276K]

[An Image-Based Method for Obtaining Pore-Size Distribution of](#)




Porous Media

Zhen Yang, Xiao-Feng Peng, Duu-Jong Lee and Ming-Yuan Chen

Publication Date (Web): April 2, 2009 (Article)

DOI: 10.1021/es900097e

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3487K]
-  [PDF w/ Links](#)[336K]

Remediation and Control Technologies




Highly Active Pd-on-Magnetite Nanocatalysts for Aqueous Phase Hydrodechlorination Reactions

Heike Hildebrand, Katrin Mackenzie and Frank-Dieter Kopinke

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es802726v

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3852K]
-  [PDF w/ Links](#)[205K]

Improved Photocatalytic Degradation of Textile Dye Using Titanium Dioxide Nanotubes Formed Over Titanium Wires




Archana Kar, York R. Smith and Vaidyanathan (Ravi) Subramanian

pp 3260–3265

Publication Date (Web): March 31, 2009 (Article)

DOI: 10.1021/es8031049

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2997K]
-  [PDF w/ Links](#)[181K]




[Mercury Removal from Flue Gases by Novel Regenerable Magnetic Nanocomposite Sorbents](#)

Jie Dong, Zhenghe Xu and Steven M. Kuznicki

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es803306n

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3942K]
-  [PDF w/ Links](#)[233K]




[Two-Step Optimization of Pressure and Recovery of Reverse Osmosis Desalination Process](#)

Shuang Liang, Cui Liu and Lianfa Song

Publication Date (Web): April 2, 2009 (Article)

DOI: 10.1021/es803692h

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[2320K]
-  [PDF w/ Links](#)[280K]




Interactions of Pb(II)/Pb(IV) Solid Phases with Chlorine and Their Effects on Lead Release

Haizhou Liu, Gregory V. Korshin and John F. Ferguson

Publication Date (Web): March 25, 2009 (Article)

DOI: 10.1021/es803179b

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1330K]
-  [PDF w/ Links](#)[294K]




Dairy-Manure Derived Biochar Effectively Sorbs Lead and Atrazine

Xinde Cao, Lena Ma, Bin Gao and Willie Harris

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es803092k

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[508K]
-  [PDF w/ Links](#)[203K]




Aqueous Ethanol modified Nanoscale Zerovalent Iron in Bromate Reduction: Synthesis, Characterization, and Reactivity

Qiliang Wang, Shane Snyder, Jungwoo Kim and Heechul Choi

Publication Date (Web): March 27, 2009 (Article)

DOI: 10.1021/es803540b

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1097K]
-  [PDF w/ Links](#)[265K]

Sustainability Engineering and Green Chemistry




[LCA as a Decision Support Tool for the Environmental Improvement of the Operation of a Municipal Wastewater Treatment Plant](#)

Jorgelina C. Pasqualino, Montse Meneses, Montserrat Abella and Francesc Castells

Publication Date (Web): April 6, 2009 (Article)

DOI: 10.1021/es802056r

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3643K]
-  [PDF w/ Links](#)[506K]

Ecotoxicology and Human Environmental Health

[Uptake of Hydrophobic Metal Complexes by Three Freshwater Algae: Unexpected Influence of pH](#)

Amiel Boullemant, Michel Lavoie, Claude Fortin and Peter G.C. Campbell

Publication Date (Web): April 6, 2009 (Article)

DOI: 10.1021/es802832u

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)

-  [Hi-Res PDF](#)[249K]
-  [PDF w/ Links](#)[169K]




[Speciation of Arsenic in *Euglena gracilis* Cells Exposed to As\(V\)](#)

Jennyfer Miot, Guillaume Morin, F riel Skouri-Panet, C line F rard, Antonine Poitevin, Emmanuel Aubry, Georges Ona-Nguema, Farid Juillot, Fran ois Guyot and Gordon E Brown, Jr.

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es802833s

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[461K]
-  [PDF w/ Links](#)[216K]




[Dispersion and Toxicity of Selected Manufactured Nanomaterials in Natural River Water Samples: Effects of Water Chemical Composition](#)

Jie Gao, Sejin Youn, Anna Hovsepyan, Ver nica L. Llaneza, Yu Wang, Gabriel Bitton and Jean-Claude J. Bonzongo

Publication Date (Web): April 2, 2009 (Article)

DOI: 10.1021/es803315v

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[389K]
-  [PDF w/ Links](#)[169K]




Genotoxicity of Environmentally Relevant Concentrations of Water-Soluble Oil Components in Cod (*Gadus morhua*)

Tor F. Holth, Bjørnar A. Beylich, Halldóra Skarphéðinsdóttir, Birgitta Liewenborg, Merete Grung and Ketil Hylland

Publication Date (Web): April 3, 2009 (Article)

DOI: 10.1021/es803479p

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[324K]
-  [PDF w/ Links](#)[174K]




Communication of Radiation-Induced Signals in Vivo between DNA Repair Deficient and Proficient Medaka (*Oryzias latipes*)

C. Mothersill, R. W. Smith, T. G. Hinton, K. Aizawa and C. B. Seymour

Publication Date (Web): March 30, 2009 (Article)

DOI: 10.1021/es8035219

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[567K]
-  [PDF w/ Links](#)[226K]

Real Time PCR for the Rapid Detection of *vanA* Gene in Surface Waters and Aquatic Macrophyte by Molecular Beacon Probe




Pushpa Lata, Siya Ram, Madhoolika Agrawal and Rishi Shanker

Publication Date (Web): April 2, 2009 (Article)

DOI: 10.1021/es803635y

[Abstract](#) | [Supporting Info](#)

[Addition/Correction](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[670K]
-  [PDF w/ Links](#)[156K]




[Arsenic Burden from Cooked Rice in the Populations of Arsenic Affected and Nonaffected Areas and Kolkata City in West-Bengal, India](#)

Arup Pal, Uttam Kumar Chowdhury, Debapriya Mondal, Bhaskar Das, Bishwajit Nayak, Arijit Ghosh, Sumana Maity and Dipankar Chakraborti

Publication Date (Web): April 1, 2009 (Article)

DOI: 10.1021/es803414j

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1304K]
-  [PDF w/ Links](#)[208K]




[Polybrominated Diphenyl Ether-Associated Alterations in Cell Biochemistry as Determined by Attenuated Total Reflection Fourier-Transform Infrared Spectroscopy: a Comparison with DNA-Reactive and/or Endocrine-Disrupting Agents](#)

Valon Llabjani, Kevin C. Jones, Gareth O. Thomas, Lee A. Walker, Richard F. Shore and Francis L. Martin

Publication Date (Web): April 1, 2009 (Article)

DOI: 10.1021/es8036127

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[4686K]
-  [PDF w/ Links](#)[733K]

Energy and the Environment




Fuel and Vehicle Technology Choices for Passenger Vehicles in Achieving Stringent CO₂ Targets: Connections between Transportation and Other Energy Sectors

M. Grahn and C. Azar, M. I. Williander, J. E. Anderson, S. A. Mueller and T. J. Wallington

Publication Date (Web): March 26, 2009 (Article)

DOI: 10.1021/es802651r

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[609K]
-  [PDF w/ Links](#)[388K]




Microbe-Assisted Sulfide Oxidation in the Anode of a Microbial Fuel Cell

Min Sun, Zhe-Xuan Mu, You-Peng Chen, Guo-Ping Sheng, Xian-Wei Liu, Yong-Zhen Chen, Yue Zhao, Hua-Lin Wang, Han-Qing Yu, Li Wei and Fang Ma

Publication Date (Web): March 30, 2009 (Article)

DOI: 10.1021/es802809m

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[806K]
-  [PDF w/ Links](#)[211K]




[Energy and Air Emissions Embodied in China–U.S. Trade: Eastbound Assessment Using Adjusted Bilateral Trade Data](#)

Ming Xu, Braden Allenby and Weiqiang Chen

Publication Date (Web): April 14, 2009 (Article)

DOI: 10.1021/es803142v

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[3328K]
-  [PDF w/ Links](#)[262K]




[Preparation of Activated Carbon by Chemical Activation under Vacuum](#)

Yang Juan and Qiu Ke-qiang

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es8036115

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1498K]
-  [PDF w/ Links](#)[344K]

[Electricity Production Coupled to Ammonium in a Microbial](#)




Fuel Cell

Zhen He, Jinjun Kan, Yanbing Wang, Yuelong Huang, Florian Mansfeld and Kenneth H. Nealson

Publication Date (Web): March 23, 2009 (Article)

DOI: 10.1021/es803492c

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[1597K]
-  [PDF w/ Links](#)[254K]

Correspondence




Comment on “Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes”

Jin Jiang, Su-Yan Pang and Jun Ma

Publication Date (Web): April 2, 2009 (Correspondence/Rebuttal)

DOI: 10.1021/es803273b

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[48K]
-  [PDF w/ Links](#)[48K]




Response to Comment on “Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes”

Wei Chen, Lin Duan, Lilin Wang and Dongqiang Zhu

Publication Date (Web): April 2, 2009 (Correspondence/Rebuttal)

DOI: 10.1021/es900060k

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[93K]
-  [PDF w/ Links](#)[80K]

Additions and Corrections




[Dense Nonaqueous Phase Liquid Architecture and Dissolution in Discretely Fractured Sandstone Blocks](#)

Charles E. Schaefer, Amy V. Callaghan, Jared D. King and John E. McCray

Publication Date (Web): March 30, 2009 (Addition/Correction)

DOI: 10.1021/es900844m

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF](#)[29K]
-  [PDF w/ Links](#)[30K]

Select All For Selected Content:

[Previous Issue](#) [Next Issue](#)

Advertisements



[Info for Advertisers](#)



Browse By Issue

[List of Issues](#)

Stay Current

Get your research ASAP.




[e-Alerts](#) | [RSS Feeds](#) 

Advertisements

[Info for Advertisers](#)

Copyright © 2009 American Chemical Society
1155 Sixteenth Street N.W., Washington, DC 20036

[Journals A–Z](#) | [Books](#) | [Authors & Reviewers](#) | [Librarians](#) | [ACS Members](#) | [Help](#)

   ACS Publications is a partner of:
Technology Partner - [Atypon Systems, Inc.](#)