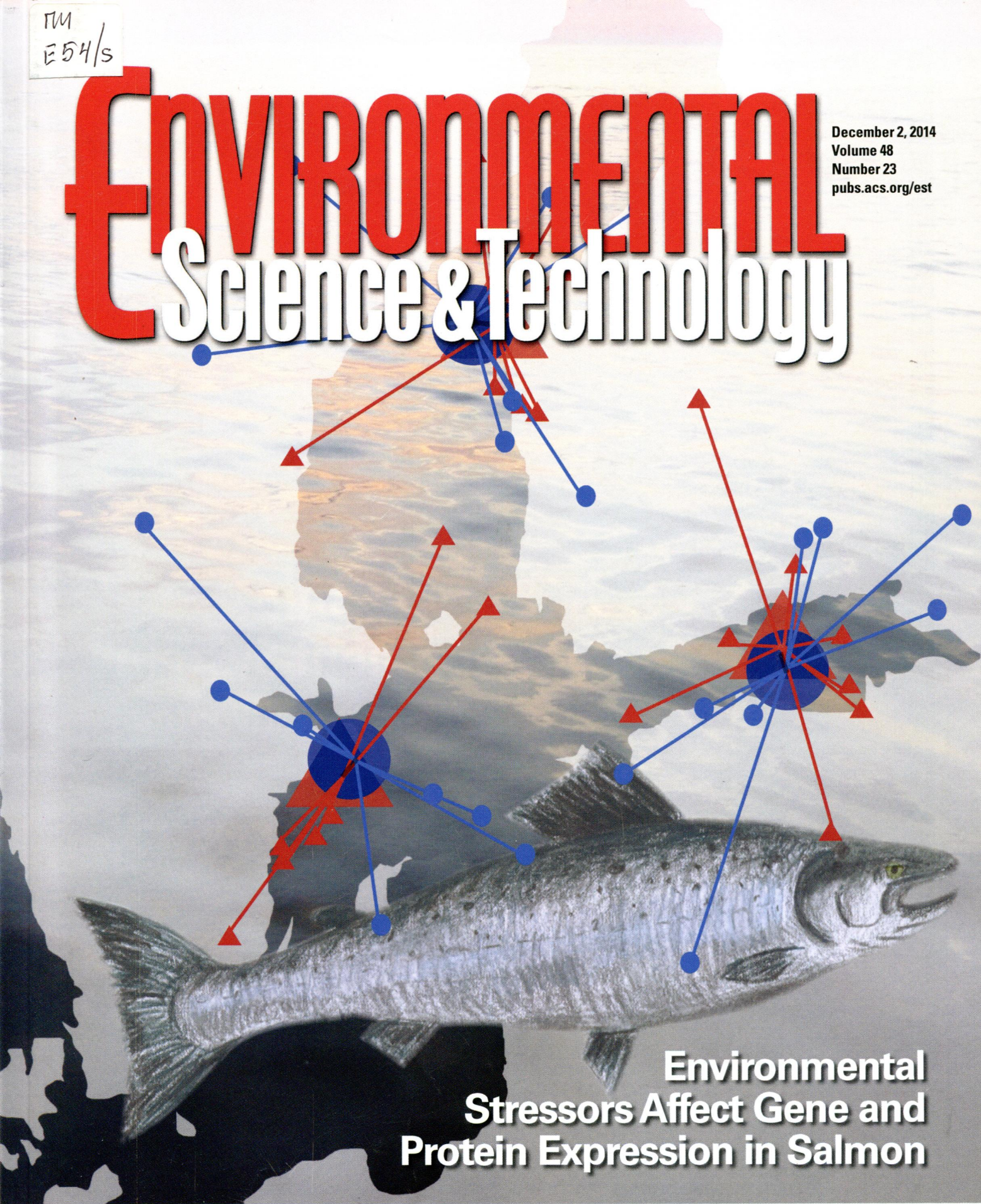


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**Environmental
Stressors Affect Gene and
Protein Expression in Salmon**



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ON THE COVER: How do gene and protein expression change in populations of wild fish exposed to environmental stressors? This month's cover article gains understanding of these connections by studying three different populations of Atlantic Salmon using the tools of transcriptomics and label-free proteomics.

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


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DOI: 10.1021/es503512v

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DOI: 10.1021/es5035188

Intermediate-Volatility Organic Compounds: A Large Source of Secondary Organic Aerosol

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DOI: 10.1021/es503669u

Properties of Fe-Organic Matter Associations via Coprecipitation versus Adsorption

Chunmei Chen,* James J. Dynes, Jian Wang, and Donald L. Sparks

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Effect of Ammonia on the Volatility of Organic Diacids

Andrea L. Paciga, Ilona Riipinen, and Spyros N. Pandis*

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DOI: 10.1021/es504038a

Evidence of Polyethylene Biodegradation by Bacterial Strains from the Guts of Plastic-Eating Waxworms

Jun Yang,* Yu Yang, Wei-Min Wu, Jiao Zhao, and Lei Jiang

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DOI: 10.1021/es504108u

Role of Air Bubbles Overlooked in the Adsorption of Perfluorooctanesulfonate on Hydrophobic Carbonaceous Adsorbents


Pingping Meng, Shubo Deng,* Xinyu Lu, Ziwen Du, Bin Wang, Jun Huang, Yujue Wang, Gang Yu, and Baoshan Xing

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DOI: 10.1021/es504251v

Zinc Oxide Nanoparticles Cause Inhibition of Microbial Denitrification by Affecting Transcriptional Regulation and Enzyme Activity

Xiong Zheng, Yinglong Su, Yinguang Chen,* Rui Wan, Kun Liu, Mu Li, and Daqiang Yin

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Chao Li, Hong-Bin Xie, Jingwen Chen,* Xianhai Yang, Yifei Zhang, and Xianliang Qiao

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DOI: 10.1021/es503137b

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Lei Huang and Stuart A. Batterman*

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Full-Scale Validation of a Model of Algal Productivity

Quentin Béchet, Andy Shilton, and Benoit Guieysse*


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DOI: 10.1021/es503696k

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Ye Huang, Huizhong Shen, Han Chen, Rong Wang, Yanyan Zhang, Shu Su, Yuanchen Chen, Nan Lin, Shaojie Zhuo, Qirui Zhong, Xilong Wang, Junfeng Liu, Bengang Li, Wenxin Liu, and Shu Tao*

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DOI: 10.1021/es503090s

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Anne L. Myers,* Trudy Watson-Leung, Karl J. Jobst, Li Shen, Sladjana Besevic, Kari Organtini, Frank L. Dorman, Scott A. Mabury, and Eric J. Reiner

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DOI: 10.1021/es503472h

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Robert D. Stedfeld, Tiffany M. Stedfeld, Maggie Kronlein, Gregoire Seyrig, Robert J. Steffan, Alison M. Cupples, and Syed A. Hashsham*

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Han Liu, Kuichang Zuo, and Chad D. Vecitis*

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Novel Nanofiltration Membranes Consisting of a Sulfonated Pentablock Copolymer Rejection Layer for Heavy Metal Removal


Zhiwei Thong, Gang Han, Yue Cui, Jie Gao, Tai-Shung Chung,* Sui Yung Chan, and Shawn Wei

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Molecular Insights of Oxidation Process of Iron Nanoparticles: Spectroscopic, Magnetic, and Microscopic Evidence


Naresh Kumar, Mélanie Auffan,* Jérôme Gattacceca, Jérôme Rose, Luca Olivi, Daniel Borschneck, Petr Kvapil, Michael Jublot, Delphine Kaifas, Laure Malleret, Pierre Doumenq, and Jean-Yves Bottero

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DOI: 10.1021/es503534c

Porous Ceramic Tablet Embedded with Silver Nanopatches for Low-Cost Point-of-Use Water Purification

Beeta Ehdai, Carly Krause, and James A. Smith*

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Economical Way to Synthesize SSZ-13 with Abundant Ion-Exchanged Cu^+ for an Extraordinary Performance in Selective Catalytic Reduction (SCR) of NO_x by Ammonia

Biaohua Chen, Ruinian Xu, Runduo Zhang,* and Ning Liu

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Shusheng Luo, Baowei Chen, Li Lin, Xiaowei Wang, Nora Fung-Yee Tam, and Tiangang Luan*

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Daisuke Minakata,* Stephen P. Mezyk, Jace W. Jones, Brittany R. Daws, and John C. Crittenden


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Jenia Gutman, Moshe Herzberg,* and Sharon L. Walker

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High-Yield Harvest of Nanofibers/Mesoporous Carbon Composite by Pyrolysis of Waste Biomass and Its Application for High Durability Electrochemical Energy Storage

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DOI: 10.1021/es504011m

Inflammatory Response of Lung Macrophages and Epithelial Cells after Exposure to Redox Active Nanoparticles: Effect of Solubility and Antioxidant Treatment

Martin Urner, Andreas Schlicker, Birgit Roth Z'graggen, Alexander Stepuk, Christa Booy, Karl P. Buehler, Ludwig Limbach, Corinne Chmiel, Wendelin J. Stark, and Beatrice Beck-Schimmer*

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DOI: 10.1021/es502956g

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Mirella Kanerva,* Anni Vehmas, Mikko Nikinmaa, and Kristiina A. Vuori

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DOI: 10.1021/es504216a

Co-exposure of Carboxyl-Functionalized Single-Walled Carbon Nanotubes and 17 α -Ethinylestradiol in Cultured Cells: Effects on Bioactivity and Cytotoxicity

Maoyong Song,* Fengbang Wang, Luzhe Zeng, Junfa Yin, Hailin Wang, and Guibin Jiang

Energy and the Environment

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DOI: 10.1021/es500968n

Impact of Environmental Curium on Plutonium Migration and Isotopic Signatures

Hiromu Kurosaki, Daniel I. Kaplan, and Sue B. Clark*

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DOI: 10.1021/es501426j

High Performance Monolithic Power Management System with Dynamic Maximum Power Point Tracking for Microbial Fuel Cells

Celal Erbay, Salvador Carreon-Bautista, Edgar Sanchez-Sinencio, and Arum Han*


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Libertus Darus, Pablo Ledezma, Jürg Keller, and Stefano Freguia*

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14025  DOI: 10.1021/es503837w
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Marta C. Hatzell, Muralikrishna Raju, Valerie J. Watson, Andrew G. Stack, Adri C. T. van Duin, and Bruce E. Logan*

Correspondence

14049 DOI: 10.1021/es504198f
Comment on "Environmental Implications of United States Coal Exports: A Comparative Life Cycle Assessment of Future Power System Scenarios"
Thomas M. Power* and Donovan S. Power

14051 DOI: 10.1021/es504967b
Response to Comment on "Environmental Implications of United States Coal Exports: A Comparative Life Cycle Assessment of Future Power System Scenarios"
Barrett Bohnengel, Dalia Patiño-Echeverri,* and Joule Bergerson

14053 DOI: 10.1021/es504394q
Comment on "Environmental Implications of United States Coal Exports: A Comparative Life Cycle Assessment of Future Power System Scenarios"
Alexander Q. Gilbert*

14055 DOI: 10.1021/es5049682
Response to Comment on "Environmental Implications of United States Coal Exports: A Comparative Life Cycle Assessment of Future Power System Scenarios"
Barrett Bohnengel, Dalia Patiño-Echeverri,* and Joule Bergerson

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DOI: 10.1021/es504574v

Comment on "Scientists' Views about Attribution of Global Warming"

José L. Duarte*

14059

DOI: 10.1021/es505183e

Reply to Comment on "Scientists' Views about Attribution of Global Warming"

Bart Verheggen,* Bart Strengers, Kees Vringer, John Cook, Rob van Dorland, Jeroen Peters, Hans Visser, and Leo Meyer

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Comment on "PAH Concentrations in Lake Sediment Decline Following Ban on Coal-Tar-Based Pavement Sealants in Austin, Texas"

Robert P. DeMott* and Thomas D. Gauthier*

14063

DOI: 10.1021/es5053107

Response to Comment on "PAH Concentrations in Lake Sediment Decline Following Ban on Coal-Tar-Based Pavement Sealants in Austin, Texas"

Peter C. Van Metre* and Barbara J. Mahler

Additions and Corrections

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Correction to Nanoplastic Affects Growth of *S. obliquus* and Reproduction of *D. magna*

Ellen Besseling,* Bo Wang, Miquel Lüring, and Albert A. Koelmans

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Correction to PAH Concentrations in Lake Sediment Decline Following Ban on Coal-Tar-Based Pavement Sealants in Austin, Texas

Peter C. Van Metre* and Barbara J. Mahler