



清华大学环境学院  
SCHOOL OF ENVIRONMENT, TSINGHUA UNIVERSITY

# 信息简报

【2016】第 6 期 （总第 94 期）

清华大学环境学院编

2016年 7-8 月



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2013 2014

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IWA

IWA

Fellow

IWA

IWA

Water Research

Associate Editor  
ISO

IWA

IWA Fellow

IWA 2010

150

2012

IWA Fellow

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8 23 Accreditation Board for Engineering Technology  
ABET 2015-2016  
ABET  
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2014 ABET  
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2016  
2016 Tsinghua International Summer  
School-Environment



Roberta Lanna

Corrado Clini

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Communications  
continental-scale diversity of microbes in forest soils

- Nature  
Temperature mediates

Brown

James H.

pH

<http://www.nature.com/ncomms/2016/160705/ncomms12083/full/ncomms12083.html>

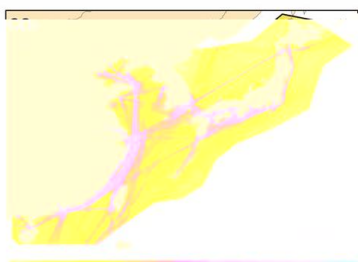
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Nanowire-Modified Three-Dimensional Electrode Enabling  
Low-Voltage Electroporation for Water Disinfection Environmental  
Science & Technology

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Environmental Science & Technology

<http://pubs.acs.org/doi/abs/10.1021/acs.est.6b01050> /



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Research Article

Nature Climate Change

ocean-going vessels in East Asia

Health and climate impacts of

4-7%

PM2.5

19000

2005

16%

2013

14500 37500

Nature Climate Change

James Corbett

Drew Shindell

<http://nature.com/articles/doi:10.1038/nclimate3083> /

HEI

2013

36.6

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<http://pubs.healtheffects.org/view.php?id=455>

2030

27.5

2.5 m PM2.5  
HEI  
GBD MAPS  
IHME

2015 10  
PM2.5 91.6  
GBD 2013 2013  
GBD  
www.healthdata.org/gbd

2013 GBD  
GBD MAPS  
GBD MAPS  
PM2.5  
PM2.5 2013 36.6  
PM2.5  
25 17.7  
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[BAU1] PC2 GBD MAPS  
2030 PM2.5  
PC2 PM2.5  
GBD MAPS 2030  
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O Keefe  
Robert

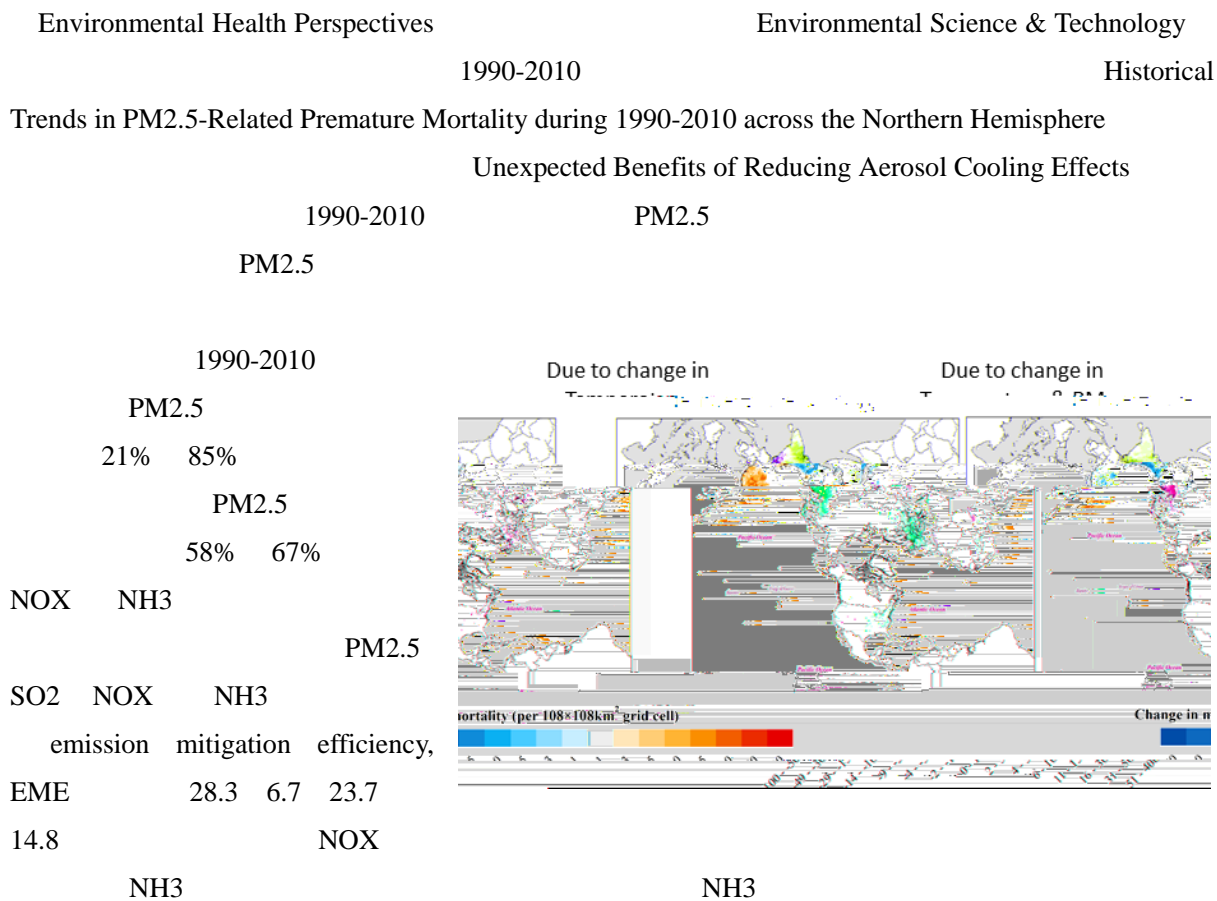
情景  
STD (2013)  
BAU1 (2030)  
BAU2 (2030)  
PC1 (2030)  
PC2 (2030)

空气PM所致死亡：中国

子行业	STD (2013)	BAU1 (2030)	BAU2 (2030)	PC1 (2030)	PC2 (2030)
交通运输	~100,000	~100,000	~100,000	~100,000	~100,000
溶剂使用	~100,000	~100,000	~100,000	~100,000	~100,000
工业 (非燃煤)	~100,000	~100,000	~100,000	~100,000	~100,000
生物质露天焚烧	~100,000	~100,000	~100,000	~100,000	~100,000
民用生物质	~100,000	~100,000	~100,000	~100,000	~100,000
民用燃煤	~100,000	~100,000	~100,000	~100,000	~100,000
电力燃煤	~100,000	~100,000	~100,000	~100,000	~100,000
工业燃煤	~100,000	~100,000	~100,000	~100,000	~100,000
燃煤：总计	~1,000,000	~1,000,000	~1,000,000	~1,000,000	~1,000,000
所有环境PM <sub>2.5</sub>	~1,000,000	~1,000,000	~1,000,000	~1,000,000	~1,000,000



GBD MAPS



Rohit Mathur

Rohit Mathur

<http://ehp.niehs.nih.gov/EHP298/>

<http://pubs.acs.org/doi/abs/10.1021/acs.est.6b00767> /



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Institute Fund ADB IWMF 2016 Asian Development Bank International Water Management World Wildlife

Susantono ADB Bambang Ravi Narayanan

ADB 2016 2007 2013 ADB <http://www.adb.org/publications/asian-water-development-outlook-2016> 2011 ADB 2015

2 2016 2016 3 IWMF International Water Center Global Water Partnership

Water Research Desalination

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Sewer-X

The development

and application of the Sewer-X model

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Sewer-X

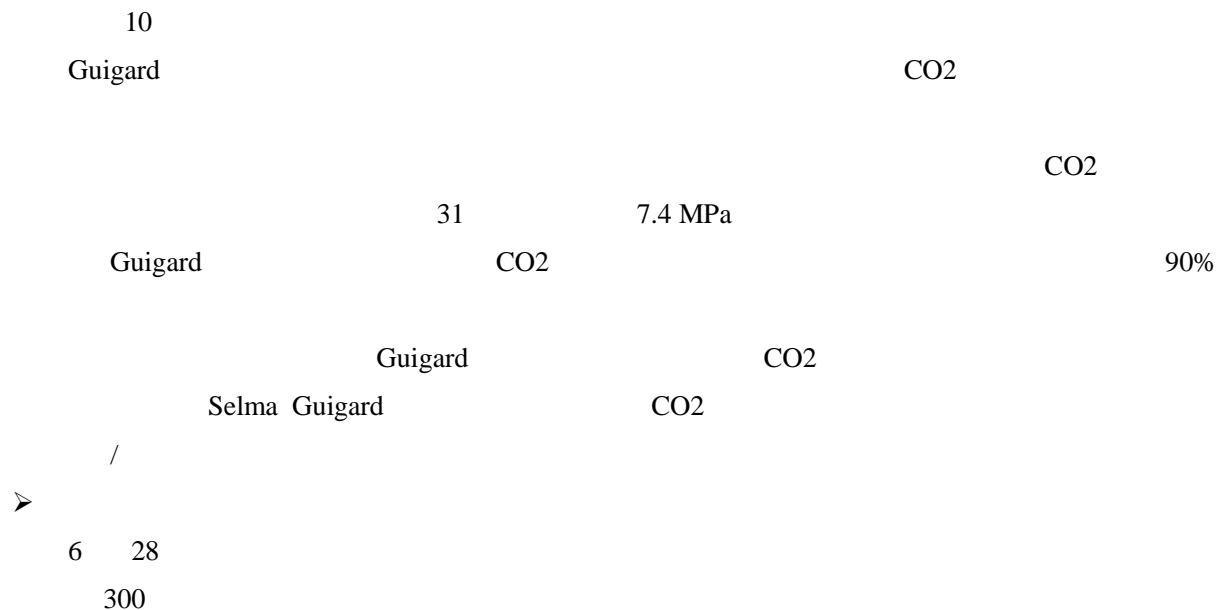
(H<sub>2</sub>S)



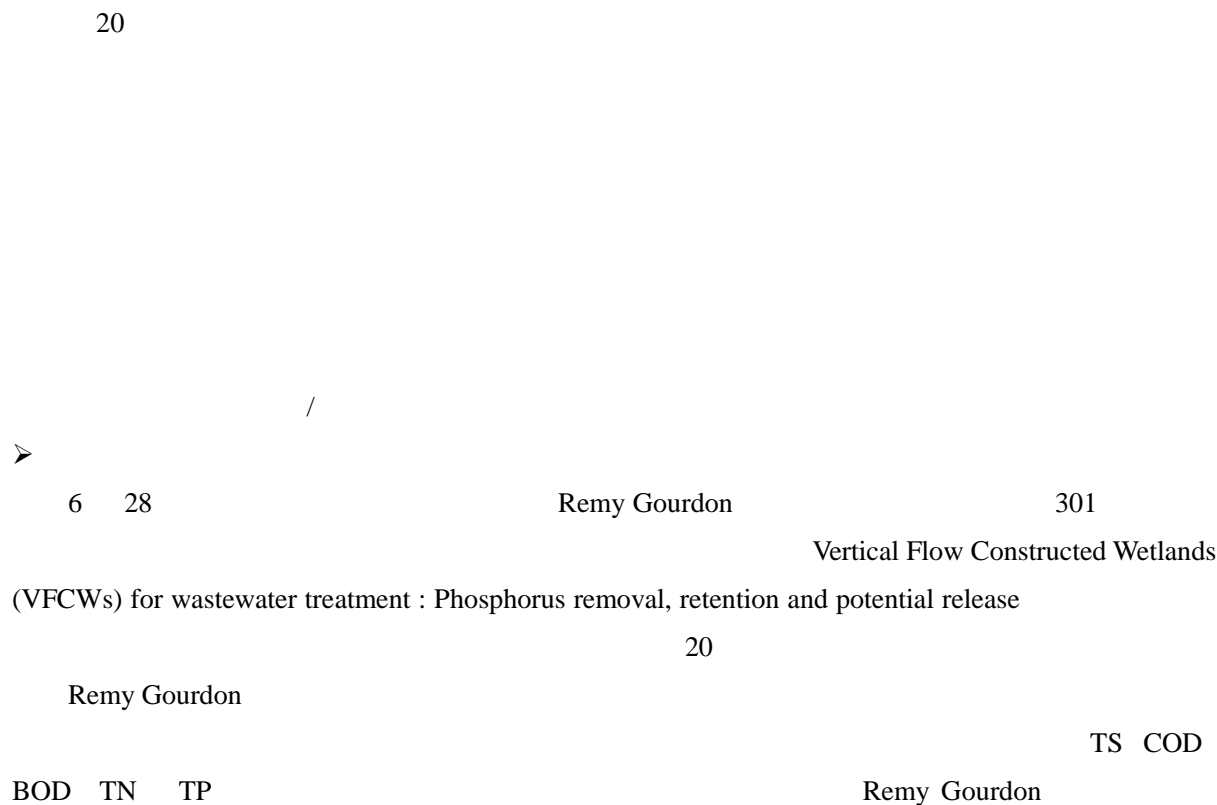
pH

Sewer-X

Fluid Extraction for Environmental Applications



Surface-enhanced Raman scattering detection of silver nanoparticles AgNPs in environmental and biological samples



Mathieu Gautier	SCIRPE	Philippe Michel	/
➤			
7 4		Douglas Worsnop	302
		1 1	Mass Spectrometry of Atmospheric Aerosol:
1 nanometer to 1 micron			20
Douglas			
Douglas		AMS	
			AMS
			HR-ToF-AMS
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➤			
7 7	MIT	Eric Alm	303
			Using genomics to improve public health
			30
Alm			
		Alm	
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7 7		Jack A. Gilbert	304
			The microbiome of our soils, plants and homes
			30
Gilbert			
			Gilbert
			/
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8 18		Menachem Elimelech	
307			Membrane
Technologies for Power Generation from Salinity Gradients and Waste Heat: Challenges and New Approaches			30



Elimelech

Pressure Retarded Osmosis, PRO

PRO PRO PRO Elimelech PRO  
10% 3.5W/m<sup>2</sup>  
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Nick Benassi

Aaron Bobick



7 25-29 2016

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Asian

Students Environmental Platform 2016 ASEP

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<http://www.env.tsinghua.edu.cn>