



ISSN 1001-6929
CN 11-1827 / X
CODEN HKYAEZ

环境科学研究

Research of Environmental Sciences



Q K 1 8 3 5 9 6 5

第31卷 第6期 (Vol.31 No.6) 2018 June 6月

2018 6

本期视点

◆ 基于燃煤电厂「近零排放」的大气污染物

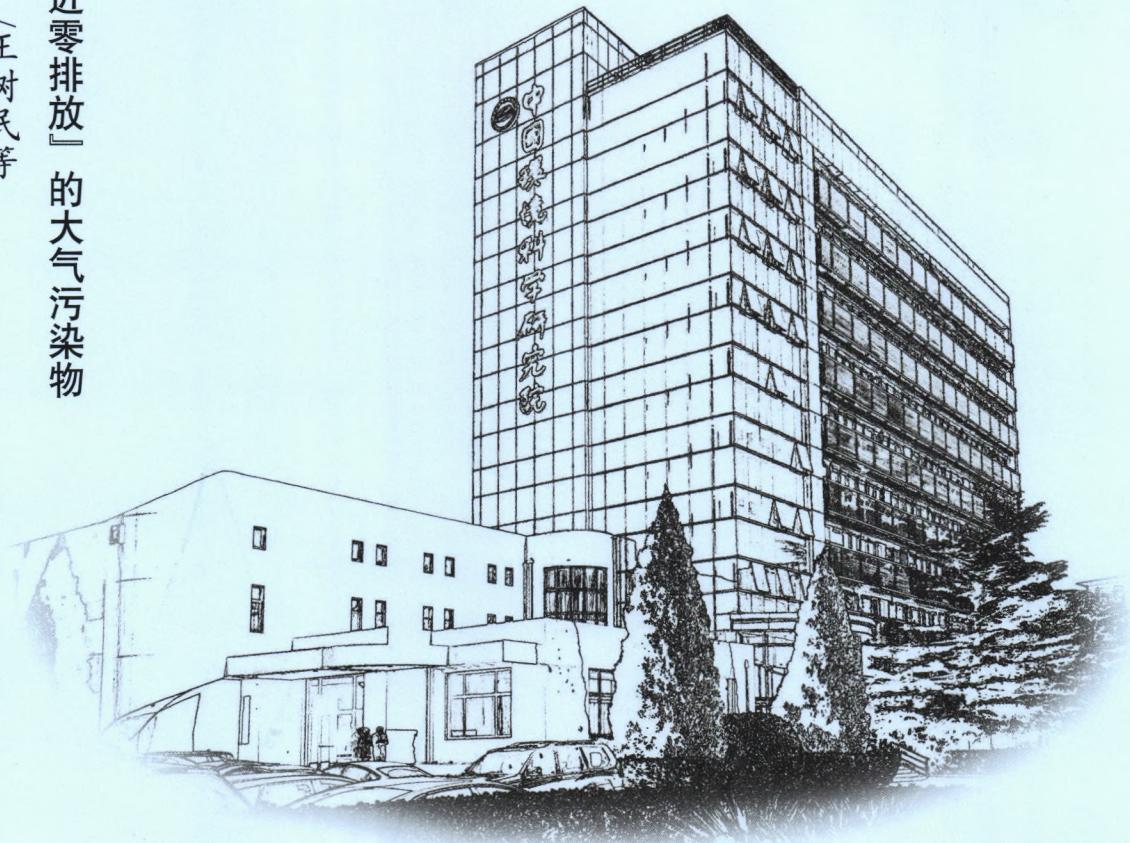
排放限值探讨 / 王树民等

◆ 「绿水青山就是金山银山」理论实践政策机制研究

/ 秦昌波等

◆ 三江源区水源涵养功能评估

/ 乔飞等



中华人民共和国生态环境部 主管 中国环境科学研究院 主办





- ☆ 全国中文核心期刊
☆ 中国科技核心期刊 (CSTPCD)
☆ 《国家哲学社会科学学术期刊数据库》(NSSD)
★ 国际检索: Scopus、CSA: NS、AJ、CABI、ZR、JST、IC、EBSCOhost 等



目次

第31卷 第6期 2018年6月

专论

基于燃煤电厂“近零排放”的大气污染物排放限值探讨

- 王树民, 余学海, 顾永正, 袁军, 张翼, 陈寅彪, 柴发合 (975)
“绿水青山就是金山银山”理论实践政策机制研究..... 秦昌波, 苏洁琼, 王倩, 万军, 王金南 (985)

展望

- 我国城市生活垃圾处理处置全过程大气排放研究进展..... 吴一鸣, 周怡静, 田贺忠, 马俊伟, 孙博文 (991)
环境态度及其与环境行为关系的文献评述与元分析..... 于亢亢, 赵华, 钱程, 高健 (1000)

研究

- 三江源区水源涵养功能评估..... 乔飞, 富国, 徐香勤, 安立会, 雷坤, 赵健, 郝晨林 (1010)
河北省涞水县大气颗粒物单颗粒分析表征及来源识别
..... 董树屏, 杜祯宇, 梁金玲, 于飞, 陈航宇, 李玉武, 殷惠民 (1019)
十堰市城区冬季 PM_{2.5} 污染特征与来源解析
..... 胡玉, 胡启辉, 杜永, 任丽红, 赵雪艳, 杨文, 王莹 (1029)
嘉兴市冬季不同空气质量等级下大气污染物的分布特征
..... 吕升, 沈利娟, 李莉, 沈赛燕, 张孝寒, 王翡, 袁婧 (1037)

- 水泥企业不同固定源 $PM_{2.5}$ 排放特性 杨建军，杜利劳，马启翔，卢立栋，申圆圆 (1049)
- 2009年与2014年太子河流域附石藻群落结构变化及其与水环境的关系 臧小苗，张远，林佳宁，马淑芹，王书平，赵茜，高欣 (1057)
- 北京市清河水体非点源污染特征 代丹，于涛，雷坤，韩雪娇，徐香勤 (1068)
- 北江流域水化学时空变化及化学风化特征 禤映雪，唐常源，曹英杰，江涛，黎坤，李锐 (1078)
- 阿哈水库 DOM 的分离及其对消毒副产物的贡献 王志康，韩月，苟攀，尹海晓，王铭，周国永，兰彬彬 (1088)
- 植茶年限对土壤水稳定性团聚体腐殖质组分特征的影响 朱仁欢，郑子成，李廷轩，刘红兵 (1096)
- 基于组分区分的亚热带湿地松人工林土壤呼吸对氮添加的响应 肖胜生，王嘉，施政，赵佳鼎，汤崇军 (1105)
- 基于生态系统服务的叶尔羌河平原绿洲生态经济协调发展分析 张雪琪，满苏尔·沙比提，马国飞 (1114)
- 纳米二氧化钛对三价砷在大型蚤体内累积与毒性的影响 王振红，李金丽，严雅萌，樊荣建，罗专溪 (1123)
- MIL-101 高效吸附测定土壤气中三氯乙烯及健康风险评估 郭晓欣，张超艳，张瑞环，姜林，周友亚，王淑萍，白利平 (1129)
- 诺氟沙星吸附剂生物炭-壳聚糖复合微球的制备优化 刘犇，郎印海，朱春苗，赵华轩 (1138)
- 巯基改性高岭土负载 CeO_2-CdS 光催化降解结晶紫 徐杰，郑建东，张丽惠，王金玉，张华，马红梅 (1144)
- 硫自养反硝化过程中含硫副产物产生规律及微生物群落结构的空间分布 万东锦，李琦，刘永德，肖书虎 (1152)

评论

- 水源安全应构筑的“三道防线” 付青 (1160)
- 用环境执法的利剑开辟企业社会责任的通途 张懿璇 (1161)
- 落实产生者主体责任 从源头遏制企业固体废物环境违法动机 刘彦君，高兴保 (1162)

信息

《环境科学研究》第五届编委会名单（封二） 征稿启事（封三）

Content

Vol.31 No.6 June 2018

SPECIALS

Discussion of Emission Limits of Air Pollutants for 'Near-Zero Emission' Coal-Fired Power Plants

..... WANG Shumin, YU Xuehai, GU Yongzheng, YUAN Jun, ZHANG Yi, CHEN Yinbiao, CHAI Fahe (975)

Practice Mechanism Analysis of the Theory of 'Lucid Waters and Lush Mountains are Invaluable Assets'

..... QIN Changbo, SU Jieqiong, WANG Qian, WAN Jun, WANG Jinnan (985)

PROSPECT

Research Advances of Atmospheric Emission from the Whole Process of Municipal Solid Waste Treatment and Disposal

in China..... WU Yiming, ZHOU Yijing, TIAN Hezhong, MA Junwei, SUN Bowen (991)

Literature Review and Meta-Analysis of the Relationship between Environmental Attitude and Environmental Behavior

..... YU Kangkang, ZHAO Hua, QIAN Cheng, GAO Jian (1000)

RESEARCH

Assessment of Water Conservation Function in the Three-River Headwaters Region

..... QIAO Fei, FU Guo, XU Xiangqin, AN Lihui, LEI Kun, ZHAO Jian, HAO Chenlin (1010)

Individual-Particle Analysis and Sources Identification of Atmospheric Fine Particles in Laishui County, Hebei Province

of China..... DOND Shuping, DU Zhenyu, LIANG Jinling, YU Fei, CHEN Hangyu, LI Yuwu, YIN Huimin (1019)

Pollution Characteristics and Source Apportionment of PM_{2.5} in Winter in Shiyan City

..... HU Yu, HU Qihui, DU Yong, REN Lihong, ZHAO Xueyan, YANG Wen, WANG Ying (1029)

Characteristics of Atmospheric Pollutants under Different Air Quality Levels of Jiaxing City in Winter

..... LÜ Sheng, SHEN Lijuan, LI Li, SHEN Saiyan, ZHANG Xiaohan, WANG Fei, YUAN Jing (1037)

PM_{2.5} Emission Characteristics of Different Stationary Sources in Cement Enterprise

..... YANG Jianjun, DU lilao, MA Qixiang, LU Lidong, SHEN Yuanyuan (1049)

Variation of Periphyton Community Structure in 2009, 2014 and Their Relationship with Environmental Factors in Taizi

River Basin

..... ZANG Xiaomiao, ZHANG Yuan, LIN Jianing, MA Shuqin, WANG Shuping, ZHAO Qian, GAO Xin (1057)

Characteristics of Non-Point Source Pollution of Qinghe River in Beijing City

..... DAI Dan, YU Tao, LEI Kun, HAN Xuejiao, XU Xiangqin (1068)

Spatial and Temporal Variation of Hydro-Chemistry and Chemical Weathering Characteristics in the Beijiang River Basin

..... XUAN Yingxue, TANG Changyuan, CAO Yingjie, JIANG Tao, LI Kun, LI Rui (1078)

The Fraction of DOM and Their Contribution to the Disinfection By-Products Formation: a Case Study in Aha Reservoir

..... WANG Zhikang, HAN Yue, GOU Pan, YIN Haixiao, WANG Ming, ZHOU Guoyong, LAN Binbin (1088)

Effect of Tea Plantation Age on Humus Fractions in Soil Water-Stable Aggregates

..... ZHU Renhuan, ZHENG Zicheng, LI Tingxuan, LIU Hongbing (1096)

Responses of Soil Respiration and Its Main Components to Nitrogen Addition in a Subtropical *Pinus elliottii* Plantation

..... XIAO Shengsheng, WANG Jia, SHI Zheng, ZHAO Jiading, TANG Chongjun (1105)

Analysis of Eco-Economic Harmonious Development in Yarkant River Plain Oasis based on Ecosystem Service Value

..... ZHANG Xueqi, MANSUR·Shabiti, MA Guofei (1114)

Influence of Nano-TiO₂ on Accumulation and Toxicity of Arsenite in *Daphnia magna*

..... WANG Zhenhong, LI Jinli, YAN Yameng, FAN Rongjian, LUO Zhanxi (1123)

Determination of Trichloroethylene in Soil Gas by MIL-101 Adsorption and Health Risk Assessment

..... GUO Xiaoxin, ZHANG Chaoyan, ZHANG Ruihuan, JIANG Lin, ZHOU Youya, WANG Shuping, BAI Liping (1129)

Optimal Preparation of Biochar-Chitosan Composite Microspheres for Highly Efficient Adsorption of Norfloxacin

..... LIU Ben, LANG Yinhai, ZHU Chunmiao, ZHAO Huaxuan (1138)

Photocatalytic Degradation of Crystal Violet by Modified Sulfhydryl Kaolin Coated CeO₂-CdS

..... XU Jie, ZHENG Jiandong, ZHANG Lihui, WANG Jinyu, ZHANG Hua, MA Hongmei (1144)

Production Rule of Sulfur By-Products in Sulfur Autotrophic Denitrification and Microbial Community Special

..... WAN Dongjin, LI Qi, LIU Yongde, XIAO Shuhu (1152)



环境科学研究

Huanjing Kexue Yanjiu

(月刊, 1988 年创刊)

第 31 卷 第 6 期 (总第 245 期) 2018 年 6 月

主 管 中华人民共和国生态环境部
主 办 中国环境科学研究院
主 编 吴丰昌
编 辑 出 版 《环境科学研究》编辑部(北京朝阳区安外北苑大羊坊 8 号院, 邮编: 100012)
电子信箱: hjkxyj@vip.163.com 电话: (010)84915128 84914869
投稿网址: www.hjkxyj.org.cn
印 刷 北京博海升彩色印刷有限公司
国内总发行 中国邮政集团公司北京市报刊发行局
订 阅 处 全国各地邮局
邮发代号 82-384
国外总发行 中国出版对外贸易总公司(北京 782 信箱, 邮编: 100011)
发行代号 DK 11025

Research of Environmental Sciences

(Monthly, Founded in 1988)

Vol.31 No.6 (Total 245) June 2018

Responsible Institution Ministry of Ecology and Environment of the People's Republic of China

Sponsored by Chinese Research Academy of Environmental Sciences

Editor-in-Chief WU Fengchang

Edited and Published by Editorial Board, Research of Environmental Sciences (8 Dayangfang,

Beiyuan, Beijing 100012, China) Tel: (8610) 84915128

E-mail: hjkxyj@vip.163.com http://www.hjkxyj.org.cn

Distributed by China National Publishing Industry Corporation (P. Q. Box 782, Beijing 100011, China)

ISSN 1001-6929



06>
9 771001 692181

ISSN 1001-6929
CN 11-1827/X

国内定价: 55 元 / 期
660 元 / 年



微信公众号: hjkxyj_1988