

## CONTENTS

### Aquatic environment

- Adsorption of Cr(III) from acidic solutions by crop straw derived biochars  
Jingjian Pan, Jun Jiang, Renkou Xu ..... 1957
- Critical velocity in phosphorus exchange processes across the sediment-water interface  
Jun Wan, Ze Wang, Zhijie Li, Huiling Duan, Hezhong Yuan ..... 1966
- Starch/polyvinyl alcohol blended materials used as solid carbon source for tertiary denitrification of secondary effluent  
Peng Li, Jiane Zuo, Wei Xing, Lei Tang, Xiangyang Ye, Zaixing Li, Lin Yuan, Kaijun Wang, Hongtao Zhang ..... 1972
- Influence of dissolved organic matter character on mercury incorporation by planktonic organisms:  
An experimental study using oligotrophic water from Patagonian lakes  
María C. Diéguez, Claudia P. Queimaliños, Sergio Ribeiro Guevara, Mark Marvin-DiPasquale,  
Carolina Soto Cárdenas, María A. Arribére ..... 1980
- Assessment and management of the performance risk of a pilot reclaimed water disinfection process  
Guangyu Zhou, Xinhua Zhao, Lei Zhang, Qing Wu ..... 1992
- Health risks associated with heavy metals in the drinking water of Swat, northern Pakistan  
Kifayatullah Khan, Yonglong Lu, Hizbullah Khan,  
Shahida Zakir, Ihsanullah, Sardar Khan, Akbar Ali Khan, Luo Wei, Tieyu Wang ..... 2003
- Establishing eutrophication assessment standards for four lake regions, China  
Shouliang Huo, Chunzi Ma, Beidou Xi, Jing Su, Fengyu Zan, Danfeng Ji, Zhuoshi He ..... 2014
- Electrochemical oxidation of recalcitrant organic compounds in biologically treated municipal solid waste  
leachate in a flow reactor  
Xuejun Quan, Zhiliang Cheng, Bo Chen, Xincui Zhu ..... 2023
- Identical full-scale biogas-lift reactors (BLRs) with anaerobic granular sludge and residual activated sludge  
for brewery wastewater treatment and kinetic modeling  
Fu Xu, Zhenxing Huang, Hengfeng Miao, Hongyan Ren, Mingxing Zhao, Wenquan Ruan ..... 2031
- Water quality evaluation of Haihe River with fuzzy similarity measure methods  
Xiaojing Wang, Zhihong Zou, Hui Zou ..... 2041
- Waste oyster shell as a kind of active filler to treat the combined wastewater at an estuary  
Hongbing Luo, Gu Huang, Xiaoying Fu, Xiaoling Liu, Daocai Zheng, Jian Peng, ..... 2047  
Ke Zhang, Bo Huang, Liangqian Fan, Fenghui Chen, Xiubo Sun
- Waste activated sludge treatment based on temperature staged and biologically phased anaerobic digestion system  
Jingwen Yu, Mingxia Zheng, Tao Tao, Jiane Zuo, Kaijun Wang ..... 2056
- Diel and seasonal variation of methane and carbon dioxide fluxes at Site Guojiaba, the Three Gorges Reservoir  
Shangbin Xiao, Yuchun Wang, Defu Liu, Zhengjian Yang, Dan Lei, Cheng Zhang ..... 2065

### Atmospheric environment

- Emissions of parent, nitrated, and oxygenated polycyclic aromatic hydrocarbons from indoor corn straw  
burning in normal and controlled combustion conditions  
Guofeng Shen, Miao Xue, Siye Wei, Yuanchen Chen, Bin Wang, Rong Wang, Yan Lv, Huizhong Shen,  
Wei Li, Yanyan Zhang, Ye Huang, Han Chen, Wen Wei, Qiuyue Zhao, Bing Li, Haisuo Wu, Shu Tao ..... 2072
- Capture of carbon dioxide from flue gas on TEPA-grafted metal-organic framework Mg<sub>2</sub> (dobdc)  
Yan Cao, Fujiao Song, Yunxia Zhao, Qin Zhong ..... 2081
- Atmospheric emission characterization of a novel sludge drying and co-combustion system  
Shengyong Lu, Liqin Yang, Fa Zhou, Fei Wang, Jianhua Yan, Xiaodong Li, Yong Chi, Kefa Cen ..... 2088

### Terrestrial environment

- Electrochemical and spectroscopic characteristics of dissolved organic matter in a forest soil profile (**Cover story**)  
Ran Bi, Qin Lu, Tian Yuan, Shungui Zhou, Yong Yuan, Yanfei Cai ..... 2093

---

## Environmental biology

- Soil microbial community structure and function responses to successive planting of *Eucalyptus*  
Falun Chen, Hua Zheng, Kai Zhang, Zhiyun Ouyang, Huailin Li, Bing Wu, Qian Shi..... 2102
- Anaerobic co-digestion of municipal biomass wastes and waste activated sludge: Dynamic model and material balances  
Yifei Sun, Dian Wang, Wei Qiao, Wei Wang, Tianle Zhu ..... 2112

## Environmental health and toxicology

- Coking wastewater increases micronucleus frequency in mouse in vivo via oxidative stress  
Na Zhu, Hongyan Li, Guangke Li, Nan Sang ..... 2123
- Biological nutrient removal by internal circulation upflow sludge blanket reactor after landfill leachate pretreatment  
Alkhafaji R. Abood, Jianguo Bao, Zaidun N. Abudi..... 2130

## Environmental catalysis and materials

- Porous  $\text{FeO}_x/\text{BiVO}_{4-\delta}\text{S}_{0.08}$ : Highly efficient photocatalysts for the degradation of Methylene Blue under visible-light illumination  
Zhenxuan Zhao, Hongxing Dai, Jiguang Deng, Yuxi Liu, Yuan Wang, Xinwei Li,  
Guangmei Bai, Baozu Gao, Chak Tong Au ..... 2138
- Synthesis and enhanced visible-light responsive of C,N,S-tridoped  $\text{TiO}_2$  hollow spheres  
Xiaoxia Lin, Degang Fu, Lingyun Hao, Zhen Ding..... 2150
- Pure and Mg-doped self-assembled ZnO nano-particles for the enhanced photocatalytic degradation of 4-chlorophenol  
N. Clament Sagaya Selvam, S. Narayanan, L. John Kennedy, J. Judith Vijaya..... 2157

Serial parameter: CN 11-2629/X\*1989\*m\*211\*en\*P\*24\*2013-10