

## CONTENTS

**Aquatic environment**

Toxicity-based assessment of the treatment performance of wastewater treatment and reclamation processes Dongbin Wei, Zhuowei Tan, Yuguo Du .....	969
Hydrogeochemical and mineralogical characteristics related to heavy metal attenuation in a stream polluted by acid mine drainage: A case study in Dabaoshan Mine, China Huarong Zhao, Beicheng Xia, Jianqiao Qin, Jiaying Zhang .....	979
Nitrogen removal from wastewater and bacterial diversity in activated sludge at different COD/N ratios and dissolved oxygen concentrations Magdalena Zielińska, Katarzyna Bernat, Agnieszka Cydzik-Kwiatkowska, Joanna Sobolewska, Irena Wojnowska-Baryła .....	990
Nitrification characteristics of nitrobacteria immobilized in waterborne polyurethane in wastewater of corn-based ethanol fuel production Yamei Dong, Zhenjia Zhang, Yongwei Jin, Jian Lu, Xuehang Cheng, Jun Li, Yan-yan Deng, Ya-nan Feng, Dongning Chen .....	999
Contaminant removal from low-concentration polluted river water by the bio-rack wetlands Ji Wang, Lanying Zhang, Shaoyong Lu, Xiangcan Jin, Shu Gan .....	1006
Coagulation efficiency and flocs characteristics of recycling sludge during treatment of low temperature and micro-polluted water Zhiwei Zhou, Yanling Yang, Xing Li, Wei Gao, Heng Liang, Guibai Li .....	1014
Rapid decolorization of Acid Orange II aqueous solution by amorphous zero-valent iron Changqin Zhang, Zhengwang Zhu, Haifeng Zhang, Zhuangqi Hu .....	1021

**Terrestrial environment**

A review of diversity-stability relationship of soil microbial community: What do we not know? Huan Deng .....	1027
Combined remediation of DDT congeners and cadmium in soil by <i>Sphingobacterium</i> sp. D-6 and <i>Sedum alfredii</i> Hance Hua Fang, Wei Zhou, Zhengya Cao, Feifan Tang, Dandan Wang, Kailin Liu, Xiangwei Wu, Xiao'e Yang, Yongge Sun, Yunlong Yu .....	1036
Fate of tetracyclines in swine manure of three selected swine farms in China Min Qiao, Wangda Chen, Jianqiang Su, Bing Zhang, Cai Zhang .....	1047
Variability of soil organic carbon reservation capability between coastal salt marsh and riverside freshwater wetland in Chongming Dongtan and its microbial mechanism Yu Hu, Yanli Li, Lei Wang, Yushu Tang, Jinhai Chen, Xiaohua Fu, Yiquan Le, Jihua Wu .....	1053
Evaluation of solubility of polycyclic aromatic hydrocarbons in ethyl lactate/water versus ethanol/water mixtures for contaminated soil remediation applications Chiew Lin Yap, Suyin Gan, Hoon Kiat Ng .....	1064

**Environmental biology**

Diversity of methanotrophs in a simulated modified biocover reactor Zifang Chi, Wenjing Lu, Hongtao Wang, Yan Zhao .....	1076
Start-up of the anammox process from the conventional activated sludge in a hybrid bioreactor Xiumei Duan, Jiti Zhou, Sen Qiao, Xin Yin, Tian Tian, Fangdi Xu .....	1083
Histopathological studies and oxidative stress of synthesized silver nanoparticles in Mozambique tilapia ( <i>Oreochromis mossambicus</i> ) Rajakumar Govindasamy, Abdul Abdul Rahuman .....	1091

**Environmental health and toxicology**

Toxic effects of chlortetracycline on maize growth, reactive oxygen species generation and the antioxidant response Bei Wen, Yu Liu, Peng Wang, Tong Wu, Shuzhen Zhang, Xiaoquan Shan, Jingfen Lu .....	1099
Effect of arsenic contaminated irrigation water on <i>Lens culinaris</i> L. and toxicity assessment using <i>lux</i> marked biosensor F. R. Sadeque Ahmed, Ian J. Alexander, Mwinyikione Mwinyihija, Ken Killham .....	1106

**Environmental catalysis and materials**

Preparation of birnessite-supported Pt nanoparticles and their application in catalytic oxidation of formaldehyde Linlin Liu, Hua Tian, Junhui He, Donghui Wang, Qiaowen Yang .....	1117
Photocatalytic degradation of paraquat using nano-sized Cu-TiO <sub>2</sub> /SBA-15 under UV and visible light Maurice G. Sorolla II, Maria Lourdes Dalida, Pongtanawat Khemthong, Nurak Grisdanurak .....	1125
Phosphine functionalised multiwalled carbon nanotubes: A new adsorbent for the removal of nickel from aqueous solution Muleja Anga Adolph, Yangkou Mbianda Xavier, Pillay Kriveshini, Krause Rui .....	1133
Enhanced photocatalytic activity of fish scale loaded TiO <sub>2</sub> composites under solar light irradiation Li-Ngee Ho, Soon-An Ong, Hakimah Osman, Fong-Mun Chong .....	1142
Photoelectrocatalytic degradation of high COD dipterex pesticide by using TiO <sub>2</sub> /Ni photo electrode Tao Fang, Chao Yang, Lixia Liao .....	1149