



## Contents

### Volume 239

The potentiality of <i>Arthrospira platensis</i> microalgal species for mining wastewater bioremediation by biosorption removal of heavy metals ( $Zn^{2+}$ , $Cu^{2+}$ , $Pb^{2+}$ , $Fe^{2+}$ ) G. Randrianarison, M.A. Ashraf (China), J.R. Zaonarivelo (Madagascar) .....	1
Effect of effluent from a sewage treatment plant in Shanghai on the slow flow of the Yangtze River Wei Dong, Manjun Xie, Shunhua Zhu, Jianheng Zhang, Jie Yin (China) .....	13
Optimization of denitrification treatment of freshwater aquaculture tail water based on distributed control technology Qingrong Luo, Lin Chen, Fugui Liu (China) .....	19
Design of online monitoring system for heavy metal mercury in industrial wastewater based on ZigBee wireless network Lijun Zhang, Kecheng Liu, Jinxing Yu, Hesong Han, Qiu Chen, Chongming Chen (China) .....	31
Integration of $Al_2O_3$ , $CuO$ , and $TiO_2$ nanofluids for efficient solar desalination I. Elzemzmi, K. Hidouri, B. Chaouachi, H. Akrouit (Tunisia) .....	41
Solar still desalination systems: a comparative study and proposition of a new design based on the Internet of Things technique M. Benganem (Saudi Arabia), A. Mellit (Algeria, Saudi Arabia), M. Emad, A. Aljohani (Saudi Arabia) .....	54
Bacterial bioaugmentation as an efficient approach to enhance the quality of activated sludge-treated effluent E. El Bestawy, M. El Batouti, A.M. Rashad (Egypt) .....	68
Assessing impact of activated sludge treatment plant effluent on selected environmental factors: case study of Kerman wastewater treatment plant effluent S.S. Al-Islmi, H. Amiri, M. Malakootian (Iran) .....	84
Optimized allocation of water resources in the Jiulong River watershed under cooperative game based on linear programming Jiping Wang, Xiongzhi Xue (China) .....	94
Greenhouse gases concentrations and emissions in different inland water bodies in Chengdu Plain Yuewei Zhang, Xiaofeng Wang, Xiaojie Gong, Shengnan Wu, Xingzhong Yuan, Tingting Liu, Chunli Hou (China) .....	101
Method of sustainable utilization of water resources in Lake Resort based on ecological footprint Jie Deng, Jianhua Huang (China) .....	118
A case study performed in Küçükçekmece Lagoon channel/Istanbul, Turkey: how the heavy metal contamination and the seasonal variations on phytoplankton composition influence water quality N. Yilmaz, I.I. Ozyigit, I. Dogan, G. Demir, I.E. Yalcin (Turkey) .....	126
Evaluation of spatial and seasonal water quality variation of urban lake by multivariate statistical approaches for water quality improvement Siping Niu, Xiaolong Song, Jianghua Yu, Jing Wu (China) .....	137
Design and construction of a novel electrocoagulation reactor and process optimization for petrochemical spent caustic treatment D. Arabian, A. Bolhasani, S. Karamian, E. Honarvar (Iran) .....	150
Computer-aided analysis method of nitrogen pollution in an ecological river Wenzhong Zhu, Yani Hou, Erli Wang, Yi Wang (China) .....	162
Water resources supply chain of South-to-North Water Transfer Project Ting Qiu (China) .....	172
Electric energy saving control method of water conservancy project based on cloud computing Qiang Wang (China, Korea), Ke Yao (China), Pyeoung-Kee Kim (Korea) .....	181

Comprehensive dispatch model of agricultural water resources based on multi-objective quantum genetic algorithm Yaning Yan (China) .....	192
Mathematical approach to artificial neural network on Methyl violet removal with magnetically coated activated carbon E. Altıntig, S. Altundag, I. Yakan, D. Bozdog, H. Altundag (Turkey) .....	202
Polyethersulphone coated Ag-SiO <sub>2</sub> nanoparticles: a multifunctional and ultrafiltration membrane with improved performance S.A. Khan, Z.A. Rehan (Pakistan), S.S. Alharthi, E.H. Alosaimi, L. Gzara, M.S. El-Shahawi, K.A. Alamry, K. Akhtar, E.M. Bakhsh, A.M. Asiri, S.B. Khan (Saudi Arabia), E. Drioli (Italy) .....	217
Heterogeneous activation of persulfate by iron/graphene oxide-MCM for removing levofloxacin hydrochloride in water Xu Wang, Xiulei Zhang, Dongyan Zhang, Weiwei Chen, Ying Sun, Wenda Zuo, Ping Guo (China) .....	228
Investigation on the adsorption characteristics of Pb(II) onto bone char Jinli Zhang, Gang Li, Jia Liu (China) .....	241
La <sub>2</sub> O <sub>3</sub> nanoparticles: synthesis and application for removal of arsenite and phosphate from water N.Q. Bac, D.N. Nhiem, D.T. Lim, P.N. Chuc, D.T. Dung, N.T.H. Chi, D.H. Duc, L.T.V. Ha, D.Q. Khieu (Vietnam) .....	259
Settlement of soft soil treated with group of floating bottom ash columns R. Abuelgasim (Sudan, Malaysia), A.S.A. Rashid (Malaysia), M. Bouassida (Tunisia), K.N.M. Said, M.H. Abdullah (Malaysia) .....	270
Effects of mooring line hydrodynamic coefficients and wave parameters on the floating production storage and offloading motions Zhiyang Zhang, Haitao Wu, Weixing Liu (China) .....	278
Stability analysis of a red bed slope reservoir bank considering water–rock interaction characteristics Hao Zhang, Zaiqiang Hu, Bin Ma, Xingzhou Chen (China) .....	289
Corrigendum to "CuO@MWCNTs nanocomposite as non-enzyme electrochemical sensor for the detection of Malathion in seawater" published in vol. 236, October 2021, pp. 240-249 (doi:10.5004/dwt.2021.27692) E. Serag, A. El-Maghraby, N. Hassan, A. El Nemr (Egypt) .....	301
Author Index .....	302