Contents
Volume 313

Performance comparison of solar stills using two kinds of solar collectors

Modeling of heat and mass transfer in vacuum membrane distillation for seawater desalination
Z. Triki, Z. Fergani, H. Tahraoui (Algeria) .................................................................................. 12

Performance feasibility study of direct contact membrane distillation systems in the treatment of seawater
and oilfield-produced brine: the effect of hot- and cold-channel depth
H. Al-Sairfi (Kuwait), M.Z.A. Koshuriyan (UK), M. Ahmed (Kuwait) ...................................... 26

Superhydrophilic MXene/mixed-dimensional clay/PVA film for solar interfacial evaporation
Wenxiao Mu, Chenxiu Gao, Nan Wang, Yuxuan Liu, Hanxue Sun, Zhaqiu Zhu,
Jiyin Li, Weidong Liang (China) ............................................................................................... 37

Development of a ceramic membrane on a flat support for the treatment of an industrial effluent
O. Jlassi, S. Louhichi, S. Khemakhem (Tunisia) ........................................................................ 49

Performance and microbial characteristics of anaerobic/anoxic/aerobic (A2O)-biofilm system
for electroplating wastewater treatment: a pilot scale study
Yuqi Zhou, Jia Zhu, Xiao Huang, Jingsi Gao, Guijia Zhuang (China) ........................................... 74

Preparation, characterization and performance of PVDF/Al2O3, TiO2 and clay membrane
for removal of toxic metals
M. Hesavi, E. Derikvand, M. Solimani Babarsad, M. Shafaei Bejestan, M. Zendehdel (Iran) ........ 82

De-emulsification performance and mechanism of polyether-polyquaternium copolymers
and compounding products on tight gas produced water
Kai-wen Liu, Peng-cheng Hao, Zhi-qiang Hu, Xiang-wei Li, Fei Meng, Xian-zhe Guo,
Zhuo-zhuang Liu, Wu Chen (China) ......................................................................................... 92

Experiment of treating polluted wastewater resulting from petroleum refineries
using pyramid solar still distillation system to eliminate hydrocarbon toxicity

Rapid reduction of 4-nitrophenol into 4-aminophenol and industrial wastewater treatment
in the presence of UiO-66/btb/MgO catalyst
F. Amarloo, R. Zhiani, A. Motavali-zadehkakhky, M. Hosseiny, J. Mehrzad (Iran) ......................... 116

Disinfectants of plant origin: emerging application, standardization and meta-analysis
A.O. Adeeyo, B.S. Ojelade (South Africa), M.A. Alabi (Nigeria), R. Makungo (South Africa) .... 125

Controllable one-step production of 2D MgAl-LDH for photocatalytic removal of tetracycline
Xinqi Long, Yinke Wang, Jun Hu, Lixu Wu, Chun Sun, Feiping Jiao (China) ............................... 130

Adsorption performance of oxotetracycline by different modified hydroxyapatite nanoclusters
Jing-qian Xu, Juan Tian, Meng-ting Guo, Wen-bin Li, Bixia Wang,
Hong-yan Deng, Feng Shi (China) ............................................................................................. 142

Preparation and application of modified activated carbon for effective removal of phosphorus
from glyphosate by-product salt
Qisheng Wu, Jie Zhang, Sen Wang (China) .................................................................................... 152

Preparation and adsorption study of polyvinyl alcohol-functionalized
sodium alginate composite hydrogel for Pb(II) in aqueous solutions
Huiling Zhang, Ziyen Ye, Junjie Liang, Zekang Hu, Hongyu Liu (China) ..................................... 162
Removal of hexavalent chromium and methylene blue in aqueous solutions using activated carbon prepared from rubber seed shell
K. Pattarith, S. Tangtubtim, S. Thupsuri (Thailand) ................................................................. 173

Synthesis of metallic nanoparticles and its application in adsorption of metanil yellow and Rhodamine B from aqueous solution
S. Alam, Rahat Ullah, N. ur Rahman, M. Ilyas, S. Ullah, M. Zahoor (Pakistan), M.N. Umar (UK), Riaz Ullah, E.A. Ali (Saudi Arabia) ........................................................................................................ 186

Degradation of Direct Red 16 using hybrid treatment strategies based on hydrodynamic cavitation, and advanced oxidation processes
E. Noori, S. Eris, F. Omidi, S. Beigrezaee, A. Asadi (Iran) ................................................................ 196

Effect of hexadecyl trimethyl ammonium bromide on sonocatalytic degradation of Orange II by using bagasse biochar
Guoting Li, Shude Zhang, Panpan Yu, Xiao Mi, Yujie Guo, Chenliang Shen (China) ........................................ 209

A new approach to assess non-revenue water and intervention prioritization in water distribution zones by using Geographic Information System technology
H. AbuEltayef, K. Alastal, K. AbuAlhin (Palestinian Authority) .......................................................... 216

Vertical spatial optimization design of drainage water treatment facilities in coastal cities under storm surge environment
Ming Yan, Yonggang Cheng, Miao Wu (China) .................................................................................. 227

Water quality characterisation, antibacterial activity and metabolite profiling of Malaysian tropical mangrove-derived Actinophyton sp. K4-08
Z.A.Z. Abidin, N.H.M. Zin, D.S. Darnis (Malaysia), A.J.K. Chowdhury (Brunei) .................................. 236

Biosurfactant and bioemulsifier production by hydrocarbonoclastic bacteria isolated from petroleum sludge as potential biodispersant for oil spill remediation
N. Annuar, N. Azhary, N.A. Yusof, S.M. Omar (Malaysia), A.J.K. Chowdhury (Brunei), M.M. Ashaari (Malaysia) ................................................................................................................. 243

Eutrophication assessment and bloom control strategy of water body based on fuzzy rough set algorithm under the development of urban landscape lakes and reservoirs
Tao Li, Lei Wang, Dongsheng Huang, Daibo Xiao (China) .................................................................. 252

Calculation model and management system of WRCC based on grey water footprint calculation
Weili Zhang (China) ....................................................................................................................... 266

Alkaline salt solution resin for inorganic salt wastewater treatment
Yang Peng, Luan He, Xuepeng Gao (China) .................................................................................. 279

Coupling coordination analysis between urban park wetland water ecological construction and carbon emissions
Dexin Huang (China) ...................................................................................................................... 290

Integration application of finite difference flow modeling and SWAT model in the distribution and transformation of water resources in irrigation areas
Jingui Wang, Dongjuan Cheng (China) .......................................................................................... 300

Deformation law and stability state of cofferdam during pumping process in PC combined method pile cofferdam
Funing Li, Jie Huang (China) .......................................................................................................... 315

Multi-objective decision making study for flood construction risk analysis in civil engineering
Jianhua Zhou (China) ................................................................................................................... 331

Author Index .................................................................................................................................. 341