



Contents

Volume 98

Technoeconomic analysis of tri hybrid reverse osmosis-forward osmosis-multi stage flash desalination process A. Mabrouk, M. Koc, A. Abdala (Qatar)	1
Techno-economic optimization of solar thermal integrated membrane distillation for co-generation of heat and pure water N.T. Uday Kumar (UAE, Sweden), A. Martin (Sweden)	16
Kinetics of aerobic biodegradation of organic pollutants in moving bed biological reactor (MBBR) R. Saberi, A.H. Hassani, M.S. Abedi, A.T. Ardeshir, A. Mozaffari (Iran)	31
Development of <i>Arcella vulgaris</i> induced granule formation in an SBR A. Drzewicki, D. Kulikowska, K. Bernat (Poland)	37
Combined SBR and RO pilot scale treatment for pharmaceutical wastewater S.R. Reddy, V. Saritha, M.K. Karnena, B.K. Dwarapureddi (India)	45
Role of zeolite in reducing membrane fouling in a hybrid membrane bioreactor system applied for wastewater treatment H. Shahbeig, M.R. Mehrnia, H.R. Tashauoei, M. Rezaei (Iran)	52
The comparison of three common microalgae for treating piggery wastewater Haixiang Cheng, Qianyun Liu, Guozhi Zhao, Shao Yu, Luyao Li (China)	59
Techno-economic evaluation of forward/reverse osmosis hybrid system for saline water desalination H.M. Ali, A.I. Hafez, M.M.A. Khedr, H. Gadallah, R. Sabry, S.S. Ali, A.G. Gadallah (Egypt)	66
Preparation and characterization of modified activated carbon/polysulfone blended ultrafiltration membrane Yibing Ji, Jian Ke, Feifei Duan, Jianqiu Chen (China)	78
Sensitivity analysis of parameters on pure water flux for inside-out hollow ultrafiltration membrane fiber Yanning Wang, Hongying Yuan, Zhichao Zhang, Yuzhong Zhang, Dawei Jing (China)	85
Performance of flocculation titanium salts for seawater reverse osmosis pretreatment A. Shrestha, G. Naidu, M.A.H. Johir, J. Kandasamy, S. Vigneswaran (Australia)	92
Study on the effect of sulfate in the treatment of high ammonia organic wastewater Zhonghao Wan, Meng Li, Yufei Bao, Yiheng Jiang (China)	98
Desalination of concentrated wastewater from reverse osmosis by bipolar membrane electrodialysis Lu Yang, Jiachao Yao, Jiade Wang (China)	108
A comparison between alkaline earth metal titanates for application as photocatalysts in wastewater treatment I. Carazeanu Popovici, G. Stroie, G. Voicu, F. Moscalu, A. Diacon, A. Dumbrava (Romania)	115
Effect of different anions back-diffusion through cation-exchange membrane at different cathodes: anode sodium concentration ratio Xuelong Sha, Heli Zhao, Shuibo Wu, Tianbao Shao, Yongjiang Yu, Quan Kang, Huichao Su (China)	123
Microwave-alkaline treatment for enhanced disintegration and biodegradability of meat processing sludge B. Lemmer, P. Veszeloyszki-Kovács, C. Hodúr, S. Beszédes (Hungary)	130
Disinfection performance of coal-based carbon membrane coupled with electrochemical oxidation process for <i>Vibrio cholerae</i> in seawater Ping Tao, Yichen Zhou, Yuanlu Xu, Chengwen Song, Mihua Shao, Tonghua Wang (China)	137
Optimization of adsorption conditions for removal of total organic carbon from drinking water using polypropylene and titanium dioxide nano-composite by response surface methodology H. Karyab, F. Karyab, R. Haji-Mirmohammad Ali (Iran)	144
Electrochemical degradation of tetracycline by γ -Al ₂ O ₃ -Bi-(Sn/Sb) three-dimensional particle electrode Wenquan Sun, Biao Ma, Yongjun Sun, Huaili Zheng, Genchao Ma (China)	152
Statistical optimization of removal of nitro-body compounds from spent acid of toluene nitration process H.R. Pouretedal, S. Damiri, R. Najafi (Iran)	161

An in-situ transesterification of municipal activated sludge for biodiesel production H.-N.-P. Vo, X.-T. Bui, T.-T. Nguyen, T.-P. Nguyen, T.-H.-H. Le, T.-S. Nguyen (Vietnam), T.-D.-H. Vo, C. Lin (Taiwan)	169
Effect of water conductivity on gas hold-up and oxygen transfer rate in an electroflotation column N. Hajlaoui, M. Kotti, I. Ksentini, L. Ben Mansour (Tunisia)	176
Performance of hematite-grafted nonwoven geotextile layer for treatment of wastewater in SAT system: a columns study M. Sayahi, S. Eslamian, J. Abedi-Koupai (Iran)	182
Assessment of microbial and physiochemical quality of ballast water in commercial ships entering Bushehr port, along the Persian Gulf F. Soleimani, S. Dobaradaran, R. Taherkhani, R. Saeedi, M.J. Mohammadi, M. Keshtkar, M. Ghaderi, R. Mirahmadi (Iran)	190
Adsorption and photocatalysis activity of TiO ₂ /bentonite composites M. Kassir (France, Lebanon), T. Roques-Carmes, M. Pelletier, I. Bihannic, H. Alem (France), T. Hamieh, J. Toufaily (Lebanon), F. Villiéras (France)	196
Single and two-stage batch adsorber design for efficient uranium removal by activated carbon S.M.E. Yakout (Saudi Arabia), N.A. Salem (Egypt), A.A. Abdeltawab (Saudi Arabia)	216
Adsorption characteristics of Pb(II) ions onto wasted iron ore tailing with phosphorus used as natural adsorbent from aqueous solution Xiaoli Yuan, Wentang Xia, Juan An, Xuejiao Zhou, Xiaoyan Xiang, Jianguo Yin, Wenqian Yang (China)	222
Removal of lead (II) and cadmium (II) from aqueous solutions by adsorption on date pits modified by DTPAD L. Daddi Oubekka, N.E. Djelali (Algeria), V. Chaleix, V. Gloaguen (France)	233
Comparative study on adsorptive removal of Cu, Pb, Zn heavy metals by modified perlite composites A. Ates, E. Altintig, H. Demirel, M. Yilmaz (Turkey)	244
Feasibility of using non-vegetated baffled submerged constructed wetland system for removal of heavy metals, COD and nutrients from hyper-saline hazardous landfill leachate N. Meki (Egypt), M. Fujii, C. Yoshimura (Japan), A. Tawfik (Egypt)	254
Evaluation of heavy metals removal by cross-linked (polyvinyl alcohol/chitosan/magnetic) nanofibrous membrane prepared by electrospinning technique K. Kalantari, A.M. Afiffi, A. Salleh, E. Niaz Mohamad, Z. Izadiyan (Malaysia)	266
Continuous fixed-bed adsorption of Congo red dye by dual adsorbent (<i>Neurospora crassa</i> dead fungal biomass and wheat bran): experimental and theoretical breakthrough curves, immobilization and reusability studies P. Vairavel, V. Ramachandra Murty (India)	276
Adsorption kinetic, equilibrium and thermodynamic study for the removal of Congo Red from aqueous solution M.I. Khan (China), S. Zafar, M.A. Khan, A.R. Buzdar (Pakistan), P. Prapamonthon (Thailand)	294
Enhanced removal of methyl violet using NaOH-modified <i>C. camphora</i> leaves powder and its renewable adsorption Yufang Tang, Yunyun Li, Yuemei Zhao, Qiang Zhou, Yongzhen Peng (China)	306
Synthesis of new granular surfactant iron pillared montmorillonite with gluten: application to the removal of cationic dyes in mixture systems A. Louadj, O. Bouras, B. Cheknane, F. Zermane (Algeria)	315
Effect of morphology on adsorption kinetics of magnesium oxide for the removal of methyl orange Yong Liu, Ming Huang, Yaohui You, Donghai Zhu, Xiaojing Fu, Jinhai Yuan, Xiaogang Zheng, Jing Wen (China)	326
Author Index	336