



Contents
Volume 113

The role of SWRO in peak load reduction and grid stability C. Sommariva (UAE)	1
Bromide removal from chloride solutions by combined electrolysis and anion exchange processes E. Korngold, L. Aronov, T. Bejerano (Israel)	6
Optimal mass loading rate in low energetic full-scale reverse osmosis desalination G. Vaseghi, M.T. Myint, A. Ghassemi (USA)	11
The technical and economical assessment of the different electrode materials for pH recovery in the anaerobic baffled reactor on a lab-scale G. Badalians Gholikandi, B. Inanloo Beklar, M. Amouamouha (Iran)	18
Anaerobic biodegradation of wastewater discharged from a chemical synthesis-based pharmaceutical company Y. Zhang, J.D. Liang, S. Gao, Y.P. Wang, J.X. Wang (China)	28
Synthesis and characterization of stable anion exchange membranes for desalination applications M.I. Khan (China), M. Khraisheh (Qatar)	36
Multivariable statistical analysis for enhancing performance indicators in direct contact membrane distillation B. Bin Ashoor (UAE, Germany), A. Giwa, S.W. Hasan (UAE), T.B.M.J. Ouarda (Canada), A. Mhamdi (Germany)	45
The investigation of chemical coagulation and electrocoagulation processes for tannery wastewater treatment using response surface methodology H.S. Erkan, S.Y. Guvenc, G. Varank, G.O. Engin (Turkey)	57
Influence of different extraction methods on the compositions and structural characteristics of extracellular polymeric substances in biofilms from biological aerated filters Wenli Xu, Chaochao Gu, Yajie Qian, Zhenhong Liu, Gang Xue, Pin Gao (China)	74
Corrosion control and inhibition mechanism of sodium polyphosphate on highly eroded cement coating pipe surfaces Xiaohui Bai, Yang Wang, Ruilian Li, Jiao Chen, Qunli Rao, Shihu Shu (China)	81
Simultaneous adsorption of Cr(VI) ions and phenol onto commercial granular activated carbon NORIT 1240: Artificial neural network modeling and central composite design optimization D. Tabassi, S. Harbi, B. Hamrouni (Tunisia)	88
Chromium (VI) reduction in aqueous solutions using coal gangue Yan Li, Xiaojun Wang (China)	102
Design and optimization of a batch sequential contactor for the removal of chromium(VI) from industrial wastewater using sheep wool as a low-cost adsorbent P. Ray, M.A. Sabri, T.H. Ibrahim, M.I. Khamis, F.H. Jumean (UAE)	109
Graphene oxide based dispersive micro solid phase extraction for selective preconcentration of erbium from water samples and its determination by high-resolution continuum source electrothermal atomic absorption spectrometry S. Aghabalazadeh, M.R. Ganjali, P. Norouzi (Iran)	114
Scale-inhibition and adsorption capacity due to a synergistic effect between a magnetic field and graphene oxide-carbon nanotube composite Lili Jiang, Liefei Pei, Haitao Yu, Zongshu Zou, Fengman Shen, Xingang Hou (China)	121
Removal of low concentrations of heavy-metal cation based on their fixation in plants Xiao-Fang Pei, Jun Wan, Kun Zhang, Li-Hua Niu, Qian Du, Chun-Xue Zhang, Xin-Shi Wu, Bo Sun (China)	131
Recycling of alum sludge for alpha Al ₂ O ₃ production using different chemical treatments R.M. Khattab, H.A. Badr, H.H. Abo-Almaged, H.E.H. Sadek (Egypt)	148
Evaluation of sulfadiazine (SDZ) removal from wastewater by persulfate activated with iron sulfate M. Arbabi, S. Shahsavan, M. Sadeghi, A. Fadae, S. Hemati (Iran)	160

Study on salt effect of NaCl in cyanuric acid wastewater treatment Yi Li, Junbo Zhou, Yang Liu, Mingyang Han (China)	165
Natural iron oxide as catalyst for heterogeneous photocatalysis and Fenton-like process: kinetic study S. Belaidi, N. Setifi, L. Mammeri, W. Remache, K. Benhamouda, T. Sehili, K. Djebbar (Algeria)	171
Electrochemical synthesis of ferrate(VI): optimization of parameters and evaluation of their impact in production cost J. Quino-Favero, R. Eyzaguirre, P. Mogrovejo, P. Prieto, L.F. del Pino (Peru)	179
PAN chelating membranes for simultaneous removal of metallic ions and organic pollutants from aqueous solution Xin Luo, Yuanfa Liu, Yue Yu, Jing Guo, Yumei Gong, Hong Zhang (China)	187
Utilization of municipal sludge in adsorption of cadmium and phenol in Saudi Arabia M. Dauda, M.H. Al-Malack (Saudi Arabia)	195
Characterization of crystallized struvite on wastewater treatment equipment: Prospects for crystal fertilizer production E.S. Agudosi, M.A.M. Salleh, E.C. Abdullah, N.M. Mubarak, M. Khalid, A.A. Azni (Malaysia)	205
Cadmium(II) and lead(II) removal from aqueous solutions by heat-treated Algerian halloysite S. Kadi, S. Lellou, K. Marouf-Khelifa (Algeria), J. Schott (France), A. Khelifa (Algeria)	213
Organic pollutants biodegradation by halophile-isolated bacteria in saline conditions M. Jemli, F. Aloui, F. Karray, S. Sayadi (Tunisia)	227
Application of new organoclays for the adsorption of bismarck dyes from aqueous solutions B. Makhoukhi (Algeria)	235
Removal of methylene blue using polyacrylonitrile yarn waste/carboxylic group functionalized multiwall carbon nanotube nanofibrous composite S. Swaminathan, N.M. Imayathamizhan, A. Muthumanickam, G. Baskar (India)	244
Modification and characterization of C-doped TiO ₂ photocatalyst for photodegradation of reactive red (RR4) W.I. Nawawi (UK, Malaysia), A.Y. Ani, M.A.M. Ishak, A. Ramli, M.S. Azami, F. Zaid, F. Bakar, R. Zaharudin (Malaysia)	254
Adsorption of dyes from aqueous solution under batch mode using cellulosic orange peel waste S. Guiza (Tunisia), L. Franck (France), M. Bagané (Tunisia)	262
Novel synthesis of Chrysanthemum indicum flower as an adsorbent for the removal of direct Congo red from aqueous solution K. Durairaj (India, Korea), P. Senthilkumar, V. Priya, P. Velmurugan (India), A.J. Kumar (China)	270
Preparation of adsorption material through calcining waste diatomite for treatment of dye water He Zhang, Baoli Shi, Lina Jia (China)	281
Epigallocatechin gallate supported iron particles on dye decolorization and textile wastewater treatment C.D. Raman, S. Kanmani (India)	288
Optimized synthesis of polyacrylamide (PAM) with UV/H ₂ O ₂ initiating system and evaluation of its application performance Yongzhi Liu, Huaili Zheng, Bin Si, Yongjun Sun, Chun Zhao, Bincheng Xu, Xinyu Zheng (China)	296
Comparison of electrochemical advanced oxidation processes for removal of ciprofloxacin from aqueous solutions H. Pourzamani, N. Mengelizadeh, H. Mohammadi, N. Niknam, B. Neamati, R. Rahimi (Iran)	307
FeCeO _x catalyzed ultrasonic degradation of diclofenac: Influencing factors, kinetics, and mechanism Shan Chong, Guangming Zhang, Panyue Zhang, Nan Zhang, Jie Ye, Ting Huang, Yucan Liu, Zhongheng Wei (China)	319
Simulation of a pilot plant for water deoxygenation using circulating stripping gas Xinghua Han, Hao Bai, Ting Dong, Yanhong Wang, Weizhou Jiao (China)	326
Sorption of tribromophenol with magnetic ion exchange resin: Isotherm, kinetics, and thermodynamics Yulin Tang, Qianhong Liu, Yong He, Minkang Tang, Anqi Li, Jianwei Fan (China)	335
Elimination of pharmaceutical contaminants fluoxetine and propranolol by an advanced plasma water treatment A. Sohrabi, G. Haghghat, P.M. Shaibani, C.W. Van Neste, S. Naicker, M. Sadrzadeh, T. Thundat (Canada)	346
Author Index	354