



Contents

Volume 274

Intelligent infrastructure (critical) of the water supply network for collective water supply systems — a case study
P. Małka, K. Gaska, E. Wysowska, K. Kudlik, J. Ciuła (Poland) 1

Design optimization of desalination system using design of experiment method
M.O. Abu Abbas (Jordan), M.Y. Al-Abed Allah (Saudi Arabia), Q.N. Al-Oweiti (Jordan) 7

Hydrophilic polysulfone ultrafiltration membrane incorporated with reduced graphene oxide modified ZnFe₂O₄: application in the separation of simulated natural organic wastewater
Wensong Duan, Yongzheng Lian, Ting Li, Wenjie Wang, Yue Wang (China) 18

The integrated photo-catalysis/ultrafiltration membrane for treating raw oily effluents optimized using artificial neural network for fouling prediction
S. Martini (Indonesia), Y.R. Ginting (Indonesia, Australia) 30

Hybrid cellulose nanocrystals and graphene oxide polysulfone membranes for copper removal
S.N.N.A. Rased, N.A.C. Mahmud, S.M. Saufi (Malaysia), M.S. Takriff (Malaysia, UAE), W.L. Ang (Malaysia) 39

Water allocation between coal mines and chemical plants based on zero liquid discharge technology
Zhao Zemeng, Zhai Chi (China) 49

Comparative study of water quality evaluation methods in the mid- and down-stream unit basins of the Yeongsan River
Don-Woo Ha, Jonghun Baek, Byungwoong Choi, Tae Hee Hwang, Yeoungjea Lee, Dong Seok Shin, Kang-Young Jung (Korea) 60

Application of solid hide waste as an adsorbent for the treatment of industrial wastewater
E.-S.H.A. Nashy, A.M.A. Elhadad, M.A. El-Khateeb (Egypt) 76

The use of two kinds of algae as bio-sorbents for industrial wastewater treatment
S. Zighmi, H.R. Bedida, M.B. Goudjil, A. Saggai, A.A. Omar (Algeria) 83

Multivariate models for the effect of two coagulants on palm oil mill effluents
S.S. Abu Amr (Oman), A.F.M. Alkarkhi (Oman), M.S.S. Abujazar (Palestinian Authority), M.Y.D. Alazaiza (Oman), W.A.A. Alqaraghuli (Malaysia), R.J.A. Hamad (Oman), Y. Özdemir (Turkey), E. Ibrahim (Malaysia) 93

Effect of H₃PO₄ oxidation of corn cob biochar on the adsorption of a commercial glyphosate formulation
N.V.A. Marcelino, H.V.R. dos Santos, R.M.F. Cuba, F.J.C. Teran (Brazil) 102

Photocatalytic synergistic degradation of 2,4-dichlorophenol using ultraviolet LED light/ZnO hybrid oxidation process
A. Seid-Mohammadi, G. Asgari, S. Chavoshi (Iran) 115

Analysis of “desalted water” feedwater oxygenated treatment operation practice in a 350 MW supercritical unit
X.L. Liu, X.H. Hong, C. Zhou, S.C. Yang, J.W. Chen, J.Z. Zhou, W.W. Shen, W.X. Yu (China) 124

Concentration prediction of imidacloprid in water through the combination of Fourier transform infrared spectral data and 1DCNN with multilevel feature fusion
Xin Liu, Xiaojiang Tang, Junwei Guo, Lianfeng Lin (China), Feng Huang (China, France), E. Robert (France) 130

Demarcation of non-carcinogenic risk zones based on the intake of contaminated groundwater in an industrial area of southern India using geospatial techniques
V. Govindaraj, J.I. Sankar, J.N.G. Gnanamanickam, Amala S (India) 140

Synthesis and evaluation of Gemini cationic surfactant based on 4-(4-nitrobenzyl)pyridine: surface and biological activities
M. Bekhit, N.A. Negm, N.R. Abd El-Rahman, M. Fekry (Egypt) 150

Adsorption capacity assessment for selected adsorbents in the removal of over the counter (OTC) analgesics from water D. Lukášová, R. Biela, S. Moravčíková (Czech Republic)	159
Adsorption of sulfacetamide on commercial activated carbons: statistics and kinetics of adsorption J. Lach (Poland)	173
Competitive removal of tetracycline and paracetamol in the sequencing batch reactor system A. Celik (Turkey)	187
Comparative biosorption of anions (NO_3^{-1} , SO_4^{-2} , PO_4^{-3}) from aqueous solution in batch system C. Tejada-Tovar, Á. Villabona-Ortíz, Á.D. González-Delgado (Colombia)	194
Ethylenediamine functionalized chelating resin for removal of Cu(II) and Cd(II) from aqueous solution Youning Chen, Shuang Jia, Wei Zhao, Juan Song, Yuhong Li, Huan Wang (China)	206
Effect of surface roughness on mixed salt crystallization fouling in pool boiling M. Messer, K. Anderson, Xiang Zhang, B. Abbasi (USA)	219
Adsorption of phosphate by Cu-loaded polyethylenimine modified wheat straw Liuyan Han, Xu Liu, Peifeng Yang, Runping Han (China)	230
Zeolitic imidazolate framework-67 nanocrystal for high concentration Cr(VI) adsorption: a self-sacrifice process Shaojun Li, Xiaoxuan Fan, Zhongping Chen, Lei Bai (China)	239
Comparative study for the removal of crystal violet from aqueous solution by natural biomass adsorbents of a pinecone, cypress, and oak: kinetics, thermodynamics, and isotherms A.M. Al-Ma'abreh, R.A. Abuassaf, D.A. Hmedat, M. Al Khabbas, S. Awaideh, G. Edris (Jordan)	245
Highly efficient metal-organic frameworks for removal of industrial dyes from aqueous solutions M.A. El-Bindary, A. Shahat, I.M. El-Deen, M.A. Khalil, N. Hassan (Egypt)	261
High performance adsorption of orange II dye onto modified mussel shell powder Fang Zhu, Lingli Ji, Qinqin Sun, Jianfeng Ma (China), S. Komarneni (USA)	278
Decolorization of methyl orange dye by photo-Fenton process using silica gel/iron oxide catalyst H. Rasouli, M. Khodabakhshi, M. Ghorbanpour (Iran)	289
Degradation of methylene blue dye by UV/ H_2O_2 advanced oxidation process: reaction kinetics, residual H_2O_2 and specific energy consumption evaluation A. Sugha, M.S. Bhatti (India)	297
Author Index	308