



Contents

Volume 271

Potential of desalination for lithium production in the Kingdom of Saudi Arabia C.M. Fellows (Saudi Arabia, Australia), Seungwon Ihm, Sheng Li (Saudi Arabia)	1
Dual pretreatment-concentration hybrid process of salty water feed and reject of desalination plants A.E. Al-Rawajfeh, M.A. Zaitoun, A. Al-Maáberah, A.M. Al-Ma'abreh (Jordan)	6
Corrosion inhibition of iron pipes in drinking water distribution systems by a nitrate-reducing bacterium with varied nitrate concentrations Hui Zhang, Shasha Liu, Shan Chang, Yuekai Liu (China)	16
Treatment of tunnel wash water: case study from Brno I. Korytář, L. Mravcová, J. Raček, K. Veliková, P. Hlavínek (Czech Republic)	27
Phytoremediation potential of <i>Azolla pinata pinnata</i> on water quality and nutrients from agricultural water F.N.M. Saad, N.N. Remlee, I.A. Zakarya, M.A. Kamaruddin, T.N.T. Izhar, M.H. Ibrahim (Malaysia), M. Alam (Saudi Arabia), A. Andini, A. Ratnasari (Indonesia), R. Boopathy (USA), A. Syafiuddin (Indonesia)	38
Evaluation of surfactant-modified bentonite for Acid Red 88 dye adsorption in batch mode: kinetic, equilibrium, and thermodynamic studies A.D. Khatibi (Iran), M. Yilmaz (Turkey), A.H. Mahvi, D. Balarak, S. Salehi (Iran)	48
Optimal scheduling and decision-making method of reservoir water treatment based on reinforcement learning and big data Kang Xu (China)	58
Performance assessment of electrodeionization cell with different inter-membrane spacing and operating conditions A. Lakehal, K.-E. Bouhidel (Algeria)	65
Electrocoagulation process for removing dyes and chemical oxygen demand from wastewater: operational conditions and economic assessment — a review A. Gasmi (Tunisia), N. Elboughdiri (Tunisia, Saudi Arabia), D. Ghernaout (Saudi Arabia, Algeria), A. Hannachi (Tunisia), K.S. Abdel Halim (Saudi Arabia, Egypt), M.I. Khan (UAE)	74
Water quality effluent treatment using macro-composite technology at residential flat area: hydraulic retention time effects N.N.A. Razak, M.Z.M. Najib, M.Z. Abideen, S. Salmiati, S. Azman, K.V. Annammala, M.N.H. Jusoh, Y.E. Ling (Malaysia), B. Setianto, A. Syafiuddin (Indonesia), M.S. Ahmed (Saudi Arabia), M. Sillanpää (Denmark)	108
Removal of heavy metals from compost leachate using an anaerobic consecutive system of anaerobic migrating blanket reactor-anaerobic sludge bed reactor A.A. Ebrahimi, R. Khosravi, H. Eslami, M. Taghavi, F. Omid, R.A. Fallahzadeh (Iran)	116
The use of post-production waste generated in the brewing industry for the effective bioremoval of Cu(II) ions T. Kalak (Poland)	124
Adsorption performance and mechanism of lake sludge-derived ball milling biochar loaded with Fe ₃ O ₄ on Cd(II) in aqueous solution Dian Lv (China)	143
Adsorption of Cd ²⁺ , Cu ²⁺ , and Ni ²⁺ onto surfactant modified bentonite H. Merrikhpour, S. Mobarakpour, S.B. Azimi (Iran)	157
Defluoridation of geothermal water by adsorption onto activated sludge: kinetics, isotherms and thermodynamics studies Qiangying Zhang, Jian Xiong, Xiaomei Cui, Haishuai Yang, Zeng Dan, Xuebin Lu, Duo Bu (China)	166

Optimization of diclofenac sodium adsorption onto graphene nanosheets: capacity, kinetics, isotherms and removal G. da Rocha Medeiros, A.S. Pereira Júnior, F.M.F. Galvão, J.H.O. Nascimento, J.D. Tinôco (Brazil)	176
Optimized preparation of hydroxyapatite-modified carbonized rice husk and its adsorption property for Cr(VI) ions Chenglong Zou, Kun Guan, Fahui Nie, Xiaohang Sun, Wenjie Liu (China)	192
Utilization of palm leaves as an extraordinary adsorbent for the removal of Pb(II) from an aqueous solution I.W. Almanassra, M.I. Khan, A. Chatla, M.A. Atieh, A. Shanableh (UAE)	206
Promotion of conductive carbon black loaded CuFe ₂ O ₄ on the oxidative degradation of phenol by persulfate Yulu Zhang, Jiping Jia, Nanxin Chang, Yuzeng Zhao, Xinjing Meng, Honghua Ge (China)	220
Microwave-assisted rapid synthesis of Al-doped Fe ₃ O ₄ /hydroxyapatite magnetic nanocomposites in pectin matrix for removal of fluoride from aqueous solution Dezhi Qin, Guangrui Yang, Li Zhang (China)	232
Synthesis of recyclable magnetic attapulgite for purifying oily wastewater Haitao Liang, Yonghong Wu, Fei Wang, Bing Zhang (China)	244
Synthesis and characterization of novel calcined ferrihydrite-modified diatomite (FMD3 X6) and its UVA light-assisted heterogeneous photodegradation of VG3 dye W. Rezig, A. Elaziouti, N. Laouedj, M. Hadjel (Algeria)	254
Effective photocatalytic degradation of dye pollution in synthetic wastewater using nanocomposites of chromium and potassium oxides D. Hamad (Egypt), S.S. Ahmed (Egypt, Saudi Arabia), M.I. Sayyed (Jordan), M. Rashad (Egypt, Saudi Arabia)	272
Acid Blue 74 removal from aqueous solutions by EC/GAC coupling: a multi-objective optimization approach based on a hybrid NN-GA M.S. Secula, G.C. Piuleac (Romania), B. Cagnon (France)	281
Degradation of Rhodamine B dye in aqueous medium using electro-Fenton and sono-electro-Fenton process I. Boulahbel, O. Bechiri, S. Meddah, M.E. Samar (Algeria)	297
Enhanced photocatalytic degradation of tetracycline over carbon quantum dot-decorated MIL-101(Fe) composite Kun Bian, Fang-yan Chen, Chen-chen Hao, Yu-bin Tang (China)	307
Author Index	317