



Contents

Volume 213

Treatment of highly saline brines using a static freeze crystallisation process M. Ahmed (Kuwait), D. Oatley-Radcliffe, P.M. Williams (UK)	1
Modeling and simulation of water production for different solar still heights and condensation surfaces H. Akrouf, K. Hidouri, B. Chaouachi, R. Ben Slama (Tunisia)	26
Productivity enhancement of the solar still by using water cooled finned condensing pipe M. Al-Dabbas, A. Alahmer, A. Mamkagh, M.R. Gomaa (Jordan)	35
Study of a modified multiple effect distillation (MED) brackish water system for a minimal water footprint A. Hadji, N. Kasbadji Merzouk, M. Merzouk (Algeria), S. Alexopoulos (Germany), Z. Tigrine (Algeria)	44
Enhancement of solar still productivity using absorber plate with inclined perforated rectangular fins: experimental study with economic analysis W.H. Alawee, H.A. Dhahad, T.A. Mohammad (Iraq)	53
Hybrid water disinfection system with silver ion in continuous flow ultrasonic reactor F. Karaer Özmen, A.S. Kopalal (Turkey)	64
Artificial neural network and mathematical approach for estimation of surface water quality parameters (case study: California, USA) E.S. Salami, M. Salari, M. Rastegar, S. Nikbakht Sheibani, M. Ehteshami (Iran)	75
Water quality assessment based on interval-valued data cluster analysis Siqing Shan, Yuebin Bai, Xiaojing Wang (China)	84
Waterborne transmission of protozoan parasites: a review of water resources in Iran — an update 2020 E. Hoseinzadeh, A. Rostamian, M. Razaghi (Iran), Chiang Wei (Taiwan)	91
Impact of clear waters parasites on the biological waste water treatment R. Zamouche-Zerdazi, M. Bouteraa, S. Hallel, M.E.A. Bouhamla, M.B. Lehocine, A.H. Meniai (Algeria)	106
Electricity consumption in the municipal water sector in an oil-exporting, water-stressed country: the case of Bahrain M. Alsabbagh, W. Al-Zubari, M. Marzooq, R. Hasan (Bahrain)	117
Study of growth kinetics of Antarctic bacterial community for biodegradation of waste canola oil K.N.M. Zahri (Malaysia), A. Zulkharnain (Japan), C. Gomez-Fuentes (Chile), S. Sabri, S.A. Ahmad (Malaysia)	128
Simple and cost-effective to fabricate P(VC/VAC) based anion exchange membranes for acid recovery via diffusion dialysis Congliang Cheng, Wei Chen, Bing Tong, Xianhai Hu, Ping Li (China)	139
Evaluation of the use of modified paved drying beds compared to the conventional sand drying beds A.A. Elbaz, A.M. Aboufotouh, E.H. ElGohary, M.T. Reham (Egypt)	148
Effect of polymer type on the characteristics of ZnO embedded nanocomposite membranes B.M. Erdugan, S. Dadashov, E. Demirel, E. Suvaci (Turkey)	159
Effect of electromagnetic treatment of treated wastewater on soil and drainage water M. Moussa (Tunisia), D. Michot (France), M. Hachicha (Tunisia)	177
Simulation of a full-scale wastewater treatment plant performance at various temperatures using Extended Activated Sludge Model No. 1 N.A. El Hattab, M.M. El-Seddik, H.S. Abdel-Halim, M.E. Matta (Egypt)	190
Comprehensive evaluation of urban water saving based on AHP-TOPSIS Xianqi Zhang, Tianyi Liang (China)	202

Current progress in metal-organic frameworks-embedded membranes for water desalination B.L. Suwandi, L.N. Widjaja, S. Catherine, S.P. Santoso, F.E. Soetaredjo (Indonesia, Taiwan), A.E. Angkawijaya (Taiwan), A.A. Anggorowati (Malaysia), S. Ismadji (Indonesia, Taiwan), P.L. Tran-Nguyen (Vietnam), Yi-Hsu Ju (Taiwan)	214
Enhancement of ciprofloxacin antibiotic removal from aqueous solution using ZnO nanoparticles coated on pistachio shell A.A. Mohammed, S.L. Kareem (Iraq)	229
In-situ measurement of Auramine-O adsorption on macroporous adsorption resins at low temperature using fiber-optic sensing T. Aydan, Jing-Jing Yang, T. Muhammad, Fei Gao, Xiao-Xia Yang, Yi-Ting Hu (China)	240
Enhanced bromate adsorption by using α -FeOOH pillared bentonite Cheng Zhong, Rui Deng, Meng Gao, Yunpeng Cao, Pan Weiliang, Li Gu, Qiang He (China)	248
Urea removal using electrocoagulation process with copper and iron electrodes M. Mamdouh, S.M. Safwat, H. Abd-Elhalim, E. Rozaik (Egypt)	259
Comparative studies of Rhodamine B decolorization in the combined process $\text{Na}_2\text{S}_2\text{O}_8$ /visible light/ultrasound P. Zawadzki (Poland)	269
Removal of organic and nitrogen compounds from landfill leachates by coagulation, Fenton and adsorption coupling processes N. Turki, N. Boujelben, Z. Bakari (Tunisia), A. Kettab (Algeria), J. Bouzid (Tunisia)	279
Trihalomethanes (THMs) removal from aqueous solutions using environmental friendly and effective adsorbent onto <i>Mespilus germanica</i> modified by $\text{Fe}_2(\text{MoO}_4)_3$ nanocomposite on equilibrium, thermodynamic, and kinetics M. Rahmani Piani, M. Abrishamkar, B. Mombeni Goodajdar, M. Hossieni (Iran)	288
Structural study of the hydrotalcite-carbon composite and its use for the removal of aqueous sulphate E. Castellar Arroyo, C. Solano Polo, J. Rodríguez-Ruiz, E. Espinosa-Fuentes, E. Meza-Fuentes (Colombia)	303
Removal of polycyclic aromatic hydrocarbons (PAHs) from contaminated sewage sludge using advanced oxidation process (hydrogen peroxide and sodium persulfate) S.A. Mokhtari, M. Gholami, A. Dargahi, M. Vosoughi (Iran)	311
High efficient photodegradation of organic dyes by TiO_2 /graphene composite under visible light radiation Guoling Li, Jianzeng Liu, Ting Zhou, Shirong Li, Yunshan Bai, Huanhuan Liu (China)	319
GAC@ Fe_3O_4 /LDHs@ Fe_3O_4 and GO@ Fe_3O_4 applied to tetracycline hydrochloride removal in three-dimensional heterogeneous electro-Fenton process Dandan Lv, Yan Wang, Hui-qiang Li (China)	328
The interaction effect of magnetism on arsenic and iron ions in water M.B. Miranzadeh, M. Naderi, V. Past (Iran)	343
High-performance removal of iron from aqueous solution using modified activated carbon prepared from corn cobs and luffa sponge N. El-Bendary, H.Kh. El-Etriby, H. Mahanna (Egypt)	348
Adsorption of Cu(II) and Cr(III) ions on SBA-15 mesoporous silica functionalized by branched amine Ying Yang, Xiang Cao, Zhenping Ma, Guohao Wu, Liangliang Zheng, Yuanyuan Zhang (China)	358
Nickel and chromium removal by electrocoagulation using copper electrodes O.A. Shaker, M.E. Matta, S.M. Safwat (Egypt)	371
Removal of Ni(II) and Co(II) ions from aqueous solutions utilizing <i>Origanum majorana</i> -capped silver nanoparticles Z. Kazemi, F. Marahel, T. Hamoule, B. Mombeni Goodajdar (Iran)	381
Removal of bismuth ion from aqueous solution by pulverized eggshells A. Abbas, Li Chen, Yu-liang Liao, Zhen-zhong Wu, Ya-qi Yu, Jin-yan Yang (China)	395
Synthesis of eco-friendly alginate-based supports for silver oxide immobilization in catalytic degradation of textile dyes A. Bibi, Sadiq-ur-Rehman, T. Akhtar, I. Ahmad (Pakistan)	406
Removal of methylene blue from aqueous solution by functionalized UiO-66 with basic moiety Shuicui Han, Jinbei Yang, Xueting Lin (China)	418

A potentially low-cost adsorbent for Methylene Blue removal from synthetic wastewater H.A. Al-Aoh, M.M.H. Aljohani (Saudi Arabia), A.A.A. Darwish (Saudi Arabia, Yemen), M. Ayaz Ahmad, S.A. Bani-Atta, M.A. Alsharif, Y.M. Mahrous, S.K. Mustafa, H.S. Al-Shehri (Saudi Arabia), L.R. Alrawashdeh (Jordan), J.N. Al-Tweher (Saudi Arabia)	431
Activated carbon fiber from natural precursors: a review of preparation methods with experimental study on jute fiber M.R. Yousuf, F. Mahnaz, S.R. Syeda (Bangladesh)	441
Author Index	459