



Contents

Volume 118

Effects of different drip irrigation patterns on water distribution in potted Yunnan red loam and yellow-sand soil and pepper growth Yijie Zhang, Zhenjie Yang, Haolin Yang, Shiyu Song, Wenqi Xu, Lingqiong Kong, Yang Yu (China)	1
Water evaluation and planning (WEAP) model application for exploring the water deficit at catchment level in Beijing Liu Yang, Xue Bai (China, USA), Nina Zheng Khanna, Sooyeon Yi (USA), Yinjie Hu, Jun Deng, Haoran Gao, Lanhe Tuo, Shijie Xiang (China), Nan Zhou (USA)	12
Optimization of irrigation schedule based on the response relationship of water consumption and yield for winter wheat in North China Plain Zhigong Peng, Baozhong Zhang, Di Xu, Jiabing Cai (China)	26
Evaluation of surface water quality using the water quality index (WQI) and the synthetic pollution index (SPI): a case study of Indus Delta region of Pakistan G.S. Solangi, A.A. Siyal, M.M. Babar, P. Siyal (Pakistan)	39
SWRO system performance optimization. Part I: Energy recovery devices A. Karameldin, N.A. Moniem, R. Afify, A.A. Elnaga (Egypt)	49
Inter-tube flow characteristics of horizontal tube falling film X. Chen, L.Y. Gong, S.Q. Shen, T. Lu (China)	61
An exploration of comprehensive evaluation method of sewage treatment construction project in small and medium towns: theory and application Jingdong Zhang, Zhenzhen Qiu, Fei Li, Qian Du (China)	70
Assessment of duckweed (<i>Lemna gibba</i> L.) growth on dam water surface as green cost-effective process to improving water quality Z. Soltani, A. Khani, K. Mahanpour, A. Marjani (Iran)	79
Comparative study on seasonal variation in hydro-chemical parameters of Ganga River water using comprehensive pollution index (CPI) at Rishikesh, (Uttarakhand) India G. Matta, P.K. Naik (India), J. Machell (UK), A. Kumar (India), L. Gjyli (Albania), A.K. Tiwari (Italy), A. Kumar (India)	87
Preparation of heterogeneous reverse osmosis membranes undergoing modification process B.S. Thaçi, S.T. Gashi, F.I. Podvorica (Kosovo)	96
Ultrafiltration for hemicelluloses recovery and purification from thermomechanical pulp mill process waters A. Bokhary, E. Maleki, Baoqiang Liao (Canada)	103
A fixed-bed electrochemical reactor with nano-TiO ₂ loading flat-sheet carbon membrane as anode for phenolic wastewater treatment Hongsen Hui, Hong Wang, Yinghui Mo, Zhen Yin, Jianxin Li, Tonghua Wang (China)	113
Sensitive low-cost CCD-based detector for determination of UV-LED water microbial disinfection R. Rasooly, Z. Magoz, J. Luo, P. Do, B.J. Hernlem (USA)	120
Assessment of groundwater quality using GIS at north-east of Iran M. Abedinpour, S.N. Nabavi (Iran)	126
Effect of pH on 17 beta-estradiol adsorption by anaerobic granule sludge combined with zero-valent iron Bai-Hang Zhao, Zhan-Zhao Wang, Jing Zhang, Jun Li, Jie-Yi Zhai, Wei Bian, Wei-Hua Li, Xian-Huai Huang (China)	135
Separation of Cu(II) ions from single-component and Cd(II)-containing solutions by LM-MEUF utilizing micellar effects of CTAB and TX100 on complex formation D. Şahin, S. Taşcıoğlu (Turkey)	143
Adsorption of Cu(II) and methylene blue from aqueous solutions by magnetic humic acid nanoparticles Rong Ping Chen, Lei Yu, Cao Xing Huang, Chen Huan Lai, Ting Ting Ma, Zi Shuai Zhang, Qiang Yong (China)	153

Evaluation of modified chitosan nanoparticles as sorbent for chromium (VI) ions from polluted water N.S. Alatawi (Saudi Arabia), N.H. Elsayed, W.S. Mohamed (Egypt)	163
Removal of chromium from aqueous solutions using a palm kernel shell adsorbent M.M. Hanafiah, N.A. Hashim, S.T. Ahmed (Malaysia), M.A. Ashraf (China)	172
Zinc and nickel removal from aqueous solution by activated carbon in batch and permeable reactive barrier (PRB) systems M.A. Ale Ebrahim, T. Ebadi (Iran)	181
Adsorption of Cd(II) and Pb(II) on biochars derived from grape vine shoots Hui-yong Li, Deng-hui Yao, Qiu-ju Feng, Hai-bo Zeng, Jian-mei Liang, Zhi Zhou, Yun Tian, Nan Zhou, Xiang-yang Lu (China)	195
Pb (II) ions sequestration from aqueous solutions by canola stalk: isotherms and kinetics studies H. Hashtroudi, M. Khiadani, Guangzhi Sun (Australia)	205
Removal of heavy metals using self-integrating bio-adsorbent from agricultural by-products and marine waste materials N.I. Yatim, M.M. Ariffin, S. Hamzah (Malaysia)	216
Adsorption of indium and zinc ions from aqueous solutions by carboxymethyl chitosan/poly (acrylic acid) microbeads Chen-Chia Huang, Jeng-Jyun Huang (Taiwan)	230
Biogas generation from distillery spent wash by using an OPUR western biotechnology process: a case study M.P. Wagh, P.D. Nemade (India)	241
Adsorption of low-level phosphate by Mg-Al layered double hydroxides and its competitive interaction with carbonate, sulfate and chloride ion Wei Liao, Hui-qiang Li, Ping Yang (China)	249
FeNi ₃ @SiO ₂ magnetic nanocomposite as a highly efficient Fenton-like catalyst for humic acid adsorption and degradation in neutral environments M. Khodadadi, M.H. Ehrampoush, A. Allahresani, M.T. Ghaneian, M.H. Lotfi, A.H. Mahvi (Iran)	258
Effect of organic loading rate and retention time on pollutant reduction in a batch process for greywater treatment N.S. Sharma, K.D. Yadav, N.D. Jariwala (India)	268
Fluoride removal behavior by aluminum- and lanthanum-doped bioadsorbents J.J. García-Sánchez, M. Solache-Ríos, S. Ventura-Cruz, V. Martínez-Miranda, A. Teutli-Sequeira (Mexico)	274
Biodegradation and toxicity of byproducts from the treatment of landfill leachate with hydrotalcite N.C. de Almeida, A.U. de Faria, V.J.A. de Oliveira, J.S. Govone, D.F. de Angelis (Brazil)	281
Modeling the calcium and magnesium removal from seawater by immobilized biomass of ureolytic bacteria <i>Bacillus subtilis</i> through response surface methodology and artificial neural networks D. Arias, M. Rivas, R. Guiñez, L.A. Cisternas (Chile)	294
Removal of direct dyes from aqueous solution via adsorption onto activated mangrove charcoal using phosphoric acid microwave-induced process N.V. Suc (Vietnam)	304
High-capacity adsorption of cationic dyes using porous magnetic adsorbent Taotao Lu, Yongfeng Zhu, Yanxing Qi, Wenbo Wang, Aiqin Wang (China)	314
Competitive removal of cationic dye (BR 46) and heavy metal (copper II) from synthetic textile effluent using adsorbent of <i>Melia Azedarach</i> sawdust M. Davoudi, H. Alidadi, M. Mehrabpour, M. Dolatabadi (Iran)	326
Investigating the use of ozonation process with calcium peroxide for the removal of reactive blue 19 dye from textile wastewater M. Malakootian, Z. Honarmandrad (Iran)	336
Carbonization of corn (<i>Zea mays</i>) cob food residue by one-step activation with sulfuric acid for methylene blue adsorption A.H. Jawad, S.A. Mohammed, M.S. Mastuli, M.F. Abdullah (Malaysia)	342
Author Index	352