



Contents

Volume 85

Experimental study on a single-slope single-basin solar still with air at different velocities P. Prakash, V. Velmurugan (India)	1
A nanofiltration membrane for the removal of color from surface water to meet Norwegian standards C. Vergel (Norway), R.N. Franks, C. Bartels (USA), M. Neculau (Spain)	6
Pilot-scale drinking water treatment plant: effects of disinfection alternatives and filtration systems T.A. Gad-Allah, M.I. Badawy, A.M.A. El-Aty, R.K. Ali, H. Saleh (Egypt), Yeomin Yoon (USA), M.E.M. Ali (Egypt)	16
Study on the preparation and properties of Cu(II) molecularly imprinted membrane (Cu(II)/MIM/PVDF) Xiaojiao Yu, Song Kou, Qian Yang, Yingjuan Zhao, Yuchen Wei, Binghua Yao (China)	25
The performance of a polymaleic-based polymeric scale inhibitor on CaCO ₃ inhibition under different water quality variables Liang-Chen Wang, Qiao-Ling Zhang, Lu Wang, Liang-Bi Wang, Xiao-Jian Wang, Xue-Song Ju, Kai Cui, Chen-Guo Zhu (China)	36
Grey water treatment using a solar powered electro-coagulator and vacuum membrane distillation system M. Ramezani-pour (Australia, New Zealand), M. Sivakumar, A. Gocev Stojanovski (Australia)	46
Prediction of water aeration efficiency in high turbulent flow F. Bunea, A. Nedelcu (Romania), D.G. Ciocan (Canada)	55
Determination of oxygen transfer coefficients in HRAP for the two aeration systems: airlift and paddle wheel F. Zouhir (Belgium), C. Keffala, H. Haddani, N. Ouazzani, L. Mandi (Morocco), J.L. Vassel (Belgium)	63
Effect of temperature on biogas production from food waste through anaerobic digestion G. Paramaguru, M. Kannan, N. Senthilkumar, P. Lawrence (India)	68
Graphene oxide modified forward osmosis membranes with improved hydrophilicity and desalination performance Xing Wu, Fang Fang, Kaisong Zhang (China)	73
Parameter optimization on the compressed polypyrrole/carbon nanotube composite electrode for capacitive deionization Dongya Ma, Yue Wang, Liwen Zhang, Zhiqiang Wang, Shichang Xu (China)	84
Comparison of energy requirements for removal of organic micropollutants from lake water and wastewater effluents by direct UV and UV/H ₂ O ₂ using excilamp G. Matafonova, V. Batoev (Russia)	92
Using aluminum-doped magnetic nanoparticles for total phosphorus removal in poultry processing wastewater R. Cowles, M. Zanghi, Leon Liu, Jie Xu (USA)	103
Chemical oxygen demand degradation of the wastewater from photovoltaic cell plants: a case study on an actual plant in Taiwan Kun-Cheng Lai, Jet-Chau Wen, Terng-Jou Wan, Shao-Yang Huang (Taiwan)	113
Study of the hydrogeochemical processes during enhanced trimethoprim and sulfamethoxazole removal in artificial composite soil treatment system Qinqin Liu, Miao Li, Fawang Zhang, Hechun Yu, Quan Zhang, Xiang Liu (China)	120
Quantification of the River Ravi pollution load and oxidation pond treatment to improve the drain water quality Y. Mahfooz, A. Yasar, A.B. Tabinda (Pakistan), M.T. Sohail (Pakistan, China), A. Siddiqua, S. Mahmood (Pakistan)	132

Improvement of bivalent metal dispersion in ternary layered double oxide (LDO) for efficient anion removal Yuan Gao, Weikang Shu, Mao Lin, Jia Zhang, Jizhi Zhou, Zhi Ping Xu, Guangren Qian (China)	138
Comparison of surface water quality to land use: a case study from Tripura, India R. Roy, M. Majumder (India)	147
Collaborative effect of secondary chlorination and organic matter content on biological safety in secondary water supply system Wei Bian, Jun Li, Baihang Zhao, Shuyan Zhang (China)	154
Purification of water contaminated with traces of Rhodamine B dye by microwave-assisted, oxidant-induced and zinc oxide catalysed advanced oxidation process P.V. Gayathri, S. Yesodharan, E.P. Yesodharan (India)	161
Kinetics, isotherms, and thermodynamic modeling of liquid-phase adsorption of Rhodamine B dye onto Fe/ZnO-shrimp shell nanocomposite Z. Saadati, M. Gilani (Iran)	175
Highly efficient ultrasonic-assisted removal of methylene blue from aqueous media by magnetic mesoporous silica: experimental design methodology, kinetic and equilibrium studies S. Nourozi, R. Zare-Dorabei (Iran)	184
Usage of magnetic nanoparticles coated with 3-(trimethoxysilyl)-1-propanethiol for removal of methylene blue from a textile mill wastewater P.S. Movaseghi, M.H. Mashhadizadeh, S. Salek Soltani (Iran)	197
Investigation of methylene blue adsorption in wastewater using nano-zeolite modified with copper F. Salimi, M. Eskandari, C. Karami (Iran)	206
Fixed bed column study for the removal of Acid Blue 25 dye using NaOH-treated fallen leaves of <i>Ficus racemosa</i> S.N. Jain, P.R. Gogate (India)	215
Adsorptive removal of Direct Red-7 from aqueous solution by uncalcined and calcined zinc aluminium carbonate layered double hydroxide – kinetics and isotherm study K. Manjula Rani, P.N. Palanisamy (India)	226
The removal of methyl orange by nanohydroxyapatite from aqueous solution: isotherm, kinetics and thermodynamics studies M. Lakrat, K. Azzaoui (Morocco), S. Jodeh (Palestinian Authority), N. Akartasse, E. Mejdoubi, A. Lamhamdi, M. Berrabah (Morocco), O. Hamed (Palestinian Authority), B. Razzouki (Morocco), M. Algarra (Spain)	237
Removal of malachite green from aqueous solution by biofibers prior and after chemical modification M.A. Andreou, I. Pashalidis (Cyprus)	250
Sonolysis and photocatalytic (sonophotocatalytic) removal of cephalixin from aqueous solution: process optimization using response surface methodology (RSM) A. Almasi, M. Mohammadi, K. Shamsi, S. Mohammadi, Z. Saeidimoghadam (Iran)	256
Removal of organic materials and hexavalent chromium from landfill leachate using a combination of electrochemical and photocatalytic processes E. Rezaie, M. Sadeghi, G. Shams Khoramabadi (Iran)	264
Removal of fluoride and arsenate ions from aqueous solutions and natural water by modified natural materials G. Vázquez Mejía, M. Solache-Ríos, V. Martínez-Miranda (Mexico)	271
Visible light driven photocatalysis for water purification by highly crystalline multiferroic BiFeO ₃ nanoparticles synthesized via wet chemical route S. Ahmad, F. Naseem, M. Shahid (Pakistan), I. Shakir, M.F.A. Aboud, M. Sarfraz (Saudi Arabia), M.A. Khan, A. Ur Rehman, M.F. Warsi (Pakistan)	282
Simultaneous reduction of hexavalent chromium and decolorization of orange II in photo/ferricarboxylate system Shouqiang Wei, Jinqiu Li (China)	291
Adsorption of Cr(VI) ions from aqueous systems using thermally sodium organo-bentonite biopolymer composite (TSOBC): response surface methodology, isotherm, kinetic and thermodynamic studies M.H. Dehghani, A. Zarei, A. Mesdaghinia, R. Nabizadeh, M. Alimohammadi, M. Afsharnia (Iran)	298

Rapid removal of aqueous Cr(VI) and the removal mechanism using ZVI/Fe ₃ O ₄ /Fe ²⁺ system Long Zhang, Fenglian Fu, Zecong Ding, Jiabin Pang (China)	313
Efficient removal of Cd(II), Cu(II), Ni(II) and Pb(II) by polyamine polyurea polymer modified with 2,4-dihydroxybenzaldehyde from synthetic and real wastewaters C. Ozer, F. Boysan, M. Imamoglu (Turkey)	320
Mesoporous treated sewage sludge as outstanding low-cost adsorbent for cadmium removal H. Ait Ahsaine, M. Zbair, R. El Haouti (Morocco)	330
On the performance of bioadsorption processes for heavy metal ions removal by low-cost agricultural and natural by-products bioadsorbent: a review Z. Al-Qodah (Saudi Arabia, Jordan), M.A. Yahya (Malaysia), M. Al-Shannag (Jordan)	339
Effects of plant species on CH ₄ emission from integrated vertical subsurface flow constructed wetlands Xin Cao, Wei Huang, Deying Huang, Yunfei Tian, Xuyao Jiang, Jibiao Zhang (China)	358
Author Index	365