



Contents
Volume 106

High recovery MSF desalination process D. Hasson, M. Shmulevsky-Lisitsin, R. Semiat, H. Shemer (Israel)	1
Cellulose triacetate (CTA)-based forward osmosis membranes for water purification: optimization of dope solution composition and preparation conditions Huaqiang Chu, Wenwen Zhang, Lin Wang, Xi Wei, Zhenjiang Yu, Yalei Zhang, Xuefei Zhou (China)	11
High selectivity polyamide reverse osmosis membrane enhanced by aminosilane-modified silicalite-1 nanozeolites Hai Huang, Huifeng Zhang, Yangyang Wei, Man Zhao, Yushan Zhang (China)	21
Impact of fouling index behavior in RO fed at different MBR operating conditions in MBR-RO Ki Tae Park, Jun Young Park, Minjin Kim, Hyung Soo Kim, Ji Hoon Kim (Korea)	32
Numerical analysis of a direct contact membrane distillation system using diesel internal combustion engine waste heat E. Norouzi, Chanwoo Park (USA)	40
Hydrophilic modification of polytetrafluoroethylene flat membranes coated by acrylic acid water-absorbent resin Chengcai Li, Hang Zhang, Hailin Zhu, Feng Wang (China)	51
Mitigation of biofouling in polymer film heat transfer applications S. Pohl, H.-J. Bart (Germany)	62
Synthesis of polystyrene coated by sand (PCS) as a novel media in modified biological aerated filters (BAF) for advanced municipal wastewater treatment: a comparative assessment A. Nikoonahad, A.H. Mahvi, M.T. Ghaneian, M.H. Ehrampoush, A.A. Ebrahimi, M.H. Lotfi (Iran)	72
Sequential coagulation treatment and processes based on ozone (O ₃ , O ₃ /UV, O ₃ /UV/H ₂ O ₂) for remediation of agro-food industrial wastewater V. Leifeld, T.A. Takashina, J.C. Zeni, M.A. Ribeiro, L. Igarashi-Mafra (Brazil)	80
Using potassium ferrate as advanced treatment for municipal wastewater Hongbo Wang, Haining Li, Ning Ding, Mei Li, Ning Wang (China)	90
Designing of zinc based coordination complex [Zn(bpeb)(OHbdc)].DMF for industrial wastewater treatment S. Mansab, S. Zulfiqar, F. Tariq, N. Ayub, K. Parveen, U. Rafique, M.J. Akhtar (Pakistan)	98
Performance and characterization of the microbial community structures in the activated sludge from wastewater treatment plant at high altitudes in Tibet of China Jin Xu, Peifang Wang, Yi Li, Lihua Niu (China)	108
Solvothermal synthesis of carbon nanotubes/Bi ₂ WO ₆ composites to improve photocatalytic activity of Bi ₂ WO ₆ Chao-Yin Kuo, Chung-Hsin Wu, Ming-Ju Hsu (Taiwan)	116
Application of chitosan/Al ₂ O ₃ nano composite for the adsorption of thorium (IV) ion from aqueous solution B. Rouhi Broujeni, A. Nilchi, A.H. Hassani, R. Saberi (Iran)	125
Insights into the adsorption capacity and breakthrough properties of uranium onto rice straw based activated carbon impregnated with ionic-liquid S.M. Yakout (Saudi Arabia, Egypt), I.M. Aziz (Saudi Arabia), A.A. Abdeltawab (Saudi Arabia, Egypt), B.M. Thamer (Saudi Arabia)	134
Modification of carbons with acids, salts, and hydrogen peroxide for the adsorption of anionic and cationic dyes in single and binary systems with Cd ²⁺ and CrO ₄ ²⁻ M.T. Hernández Eudave, R. Tovar Gómez (Mexico), C.J. Durán Valle (Spain), M.d.R. Moreno Virgen, V. Hernández Montoya, M.A. Pérez Cruz (Mexico)	139
Novel Na-zeolite covalently bonded with quaternary ammonium for simultaneous removal of phosphate, ammonium and nitrate Yong-Bao Chu, Yi Xu, Han Liu, Zi-Wen Yuan, Hua-Zhang Zhao (China)	153

Adsorptive and thermodynamic properties derived from different synthetic zeolite – groundwater ammonium species molar ratios M. Kukučka, N. Kukučka Stojanović, Ž. Tomić, D. Furundžić (Serbia)	165
Removal of Zn(II) from aqueous solutions by adsorption using different types of waste bricks Xiaoran Zhang, Mingchen Qiao, Ziyang Zhang, Ranran Song, Zheng Li, Haiyan Li (China)	177
Adsorption properties of graphene oxide/chitosan microspheres for removal of Cr(VI) from aqueous solutions Zhengyuan Song, Tao Feng, Yimin Hu, Li Wang, Xiaoqing Zhang (China)	191
Preparation of ZIF-8 nanoparticle-decorated Zn ₂ GeO ₄ nanorods with high photocatalytic performance for chromium (VI) reduction Shumin Wu, Yan Xu, Min Liu, Xianliang Li, Xia Zhang (China)	200
Efficient removal of Pb(II) and Cd(II) from water by cross-linked poly (N-vinylpyrrolidone-co-maleic anhydride)@eggshell/Fe ₃ O ₄ environmentally friendly nanocomposite E. Nazarzadeh Zare, M.M. Lakouraj, M. Masoumi (Iran)	209
Modeling of Chlorpyrifos degradation by TiO ₂ photocatalysis under visible light using response surface methodology K. Naddafi, R. Nabizadeh, S. Silva-Martínez, S.J. Shahtaheri, K. Yaghmaeian, A. Badiiei, H. Amiri (Iran)	220
Magnetic coagulant based on Moringa oleifera seeds extract and super paramagnetic nanoparticles: optimization of operational conditions and reuse evaluation T.R.T. dos Santos, M.F. Silva, M.B. de Andrade, M.F. Vieira, R. Bergamasco (Brazil)	226
Mass transfer and thermodynamic analysis on the removal of naphthalene from aqueous solution using oleic acid modified palm shell activated carbon J. Aravind Kumar, D. Joshua Amarnath, P. Senthil Kumar, C. Sai Kaushik, M. Edwin Varghese, A. Saravanan (India)	238
An insight into properties and mechanisms of a dithiocarbamate chelating agent for the removal of toxic metal ions from metallic mine wastewater Fei Feng, Daishe Wu, Jinbao Wan, Hongwei Sun, Rong Wang (China)	251
Bacterial community on submersed plants in running water H. Özbay (Turkey)	267
Adsorption of malachite green dye from solution by magnetic activated carbon in batch mode Yachan Rong, Hui Li, Linghui Xiao, Qing Wang, Yanyan Hu, Shusheng Zhang, Runping Han (China)	273
Water quality forecasting of Haihe River based on improved fuzzy time series model Ranran Li (China)	285
Batch and fixed-bed column adsorption of crystal violet and safranin by zero-valent iron (nZVI) and nZVI-modified <i>S. cerevisiae</i> U.A. Guler, O. Kundakci (Turkey)	292
Photocatalytic oxidation process (UV-Fe ₂ O ₃) efficiency for degradation of hydroquinone M. Khanahmadi, M. Hajaghazadeh, F. Nejatizadeh-Barandozi, F. Gholami-Borujeni (Iran)	305
Rehabilitation of water distribution networks using particle swarm optimization D.F. Surco, T.P.B. Vecchi, M.A.S.S. Ravagnani (Brazil)	312
Efficiency of sono-nano-catalytic process of magnesium oxide nanoparticle in removal of penicillin G from aqueous solution S. Rahdar (Iran), C. Adaobi Igwegbe (Nigeria), A. Rahdar, S. Ahmadi (Iran)	330
Author Index	336