



Contents

Volume 84

Experimental analysis of stepped basin pyramid solar still integrated with mini solar pond M. Appadurai, V. Velmurugan (India)	1
Surfactant-assisted freeze-drying synthesis of porous graphene for high-performance capacitive deionization Peng-Hui Wang, Huan Yan, Yifei Xue, Guoqian Lu, Wei Ni, Min Xu, Yi-Ming Yan (China)	8
The rejection of trihalomethanes by nanofiltration membranes: influences of adsorption and NOM fouling Di Peng, F. Saravia, K. Bock, M. Pelikan, G. Abbt-Braun, H. Horn (Germany)	19
Prediction of cyanobacteria blooms in the lower Han River (South Korea) using ensemble learning algorithms Jihoon Shin, Seonghyeon Yoon, Yoonkyung Cha (Korea)	31
Highly efficient decomposition of rhodamine B in wastewater with graphene/silver based nanocomposite catalyst: process optimization and kinetics Lixia Qin, Qiang Luo, Kejuan Liang, Shi-Zhao Kang, Guodong Li, Xiangqing Li (China)	40
Optimization, equilibrium and kinetic studies on ibuprofen removal onto microwave assisted-activated <i>Aegle marmelos correa</i> fruit shell N. Sivarajasekar, N. Mohanraj, K. Balasubramani, J. Prakash Maran, I. Ganesh Moorthy, V. Karthik, K. Karthikeyan (India)	48
Removal of hardness from RO concentrate of paper mill effluents with NF membrane for water reuse Wei Yan, Weixing Li, Fei Liu, Ming Zhou, Weihong Xing (China)	59
Application of an artificial neural network-genetic algorithm methodology for modelling and optimisation of the improved biosorption of a chemically modified peat moss: kinetic studies C. Sutherland, B.S. Chittoo, C. Venkobachar (Trinidad and Tobago)	69
Multiobjective ideal design of ANFIS for modeling and optimization of disinfectant substance consumed in water treatment A. Daghbandan, A. Habibi, A. Eftekhari (Iran)	85
Geostatistical cokriging and multivariate statistical methods to evaluate groundwater salinization in Faisalabad, Pakistan M. Ahmad, S. Chand, H.M. Rafique (Pakistan)	93
Comparison of physico-chemical characteristics of sediments from different wetland types of Huihe wetland, Inner Mongolia, China Jing He, Zhaoyan Diao, Shihai Lv, Derong Su (China)	102
Transformation impact of vertical revetment on the river water quality and its mechanism Van Tai Tang, R.P. Singh, Dafang Fu (China)	111
Experimental modeling of an air-gap membrane distillation module and simulation of a solar thermal integrated system for water purification N.T. Uday Kumar (UAE, Sweden), A. Martin (Sweden)	123
Sewage flow control using an inflow controller with an electrical conductivity sensor in the outfall B.S. Lim, M.H. Han, H.K. Park, W.H. Nam (Korea)	135
Manganese doping ordered mesoporous Co_3O_4 as heterogeneous peroxy monosulfate activator for the degradation of bisphenol A Jing Deng, Yongjian Ge, Xiaoyan Ma, Shanfang Feng, Yijing Chen, Yongqing Cheng, Hongyu Wang (China)	142
Enhanced photocatalytic activity of N-doped TiO_2 deposited on carbon fibers Xili Shang, Zhenyu Li, Meiling Liu, Changhai Li (China)	153
A novel eco-friendly advanced enzymatic Fenton oxidation process for the treatment of ship wastewater N.E. Korkmaz, A. Aksu, O.S. Taskin, E. Aslan, N. Balkis (Turkey)	160

Performance evaluation of combining microaerobic desulphurization with addition of rusty scrap iron (RSI) during waste-activated sludge digestion Renjun Ruan, Jiashun Cao, Qin Zhang, Yang Wu, Changshuang Zhao, Jingyang Luo, Zhaoxia Xue (China)	169
Relationships between phosphorus fractionations in sediments and phosphorus in overlying water in a constructed wetland: impact of macrophytes Yonglan Tian, Huayong Zhang, He Hao, Songbo Cui, Luyi Zhang, Lei Zhao, Xiang Xu (China)	180
Preparation, characterisation and catalytic performance of paper mill sludge and municipal wastewater treatment sludge-based catalysts for Fenton-like oxidation of Rhodamine B Meifang Hou, Yuanyuan Guo, Xiaoyang Chen, Min Xiao, Chunlai Hong, Yanlai Yao, Fengxiang Zhu, Weiping Wang (China)	190
Gasoline absorption performance of a polymer material Jun Chen, Xiang Yang Shen, Ke Wu, Cui Qin Yin, Juan Ci, Xin Lai Wei, Zhi Min Yu, Jie Jin (China)	199
Low-cost and eco-friendly activated carbon from modified palm kernel shell for hydrogen sulfide removal from wastewater: adsorption and kinetic studies O.A. Habeeb (Malaysia, Iraq), K. Ramesh (Malaysia), G.A.M. Ali (Malaysia, Egypt), R.M. Yunus (Malaysia)	205
The size and concentration effects of Al ₂ O ₃ nanoparticles on PSF membranes with enhanced structural stability and filtration performance S. Saki, N. Uzal, N. Ates (Turkey)	215
Kinetic and thermodynamic study on adsorption characteristics of ash derived from distilled waste of aromatic crop <i>Mentha piperita</i> : a low-cost efficient adsorbent for crystal violet removal A.P. Rawat, D.P. Singh (India)	225
Kinetic modeling of Congo red dye decolorization by US/O ₃ process: nonlinear regression analysis J. Mehr Goushchi, A. Mirzajani, B. Behjati, S.M.M. Nouri (Iran)	237
Facile synthesis and characterization of WO ₃ -Al ₂ O ₃ nanocomposites as an effective photocatalyst for degradation of Congo red under UV and visible light irradiation M. Firouzi, A. Nouri (Iran)	244
Methyl orange removal by a magnetic Fe ⁰ /Fe ₃ O ₄ /graphene composite: Influencing factors, desulfurization, and mechanism Shan Chong, Guangming Zhang, Yucan Liu, Nan Zhang, Ting Huang, Hongchen Wang (China)	255
Potassium hydroxide-treated palm kernel shell sorbents for the efficient removal of methyl violet dye Ming-Twang See, M.A. Ahmad Zaini, L.Md. Salleh, M.A.C. Yunus (Malaysia), M. Naushad (Saudi Arabia)	262
Removal of heavy-metal ions from wastewater samples using magnetic nanoparticles modified with ethylenediaminetetraacetic acid R.C. Peña, L. Cornejo (Chile), M. Bertotti (Brazil)	271
Preparation, characterization and Pd(II) adsorption characteristics of chitosan-AC composites from electroless plating solutions Y. Rajesh, N. Srinu, G. Namrata, U. Ramgopal (India)	279
Synthesis and application of functionalized nano silica for Ag(II) ions sequestration Z. Ali, R. Ahmad, A. Khan, B. Adalat (Pakistan)	292
Oxygen depolarized cathode in advanced chlor-alkali cell with Pt-Ru nanoparticles as electro-catalyst: effect of process conditions and response surface methodology M.G. Hosseini, P. Zardari (Iran)	299
Evaluation of arsenic adsorption capacity of indigenous materials for their suitability as filter media S. Mondal, C. Mahanta (India)	309
Roles of Fe(III) and Fe(VI) in enhancing dewaterability of sewage sludge based on floc size grading Yi Han, Min Zhou, Yuhui Xiao, Xian Zhou, Junjun Geng, Teng Wang, Sha Wan, Haobo Hou (China)	324
Author Index	332