

Contents

Volume 200

Exploring the performance-affecting factors of monocationic and dicationic phosphonium-based thermosresponsive ionic liquid draw solutes in forward osmosis Po-I Liu, David C. Wang, Chia-Hua Ho, Yi-Chun Chen, Li-Ching Chung, Teh-Ming Liang, Min-Chao Chang, Ren-Yang Horng (Taiwan)	1
Verification of pressure sensing sensitivity via EMI measurement of an external pipe for a membrane integrity test Won-Kyu Kim, Junkyeong Kim, Yong-Soo Lee, Seunghee Park (Korea)	8
Effects of chemical coagulation and particle cut-off on reverse osmosis membrane fouling during municipal solid waste leachate filtration W. Rukapan, C. Chiemchaisri, W. Chiemchaisri (Thailand)	14
Analysis of transfer functions and normalizations in an ANN model that predicts the transport of energy in a parabolic trough solar collector E.D. Reyes-Téllez, A. Parrales, G.E. Ramírez-Ramos, J.A. Hernández, G. Urquiza, M.I. Heredia, F.Z. Sierra (Mexico)	23
Assessment of water quality index in unmonitored river basin using multilayer perceptron neural networks and principal component analysis B. Sakaa, N. Brahmia, H. Chaffai, A. Hani (Algeria)	42
Development of a novel submerged tubular direct-contact membrane distillation system for saltwater treatment Thi-Tra-My Ngo, Xuan-Thanh Bui, Kim-Triet Dang, Thanh-Tin Nguyen (Vietnam), Shiao-Shing Chen (Taiwan), Cong-Nguyen Nguyen, Phuoc-Dan Nguyen, Manh-Ha Bui, Duy-Trinh Nguyen, Bao-Trong Dang (Vietnam)	55
Effect of food to microalgal biomass ratio on the assimilation of ammoniacal nitrogen from the secondary treated tannery effluent coupled with bio-energy generation using grown algal biomass V. Nagabalaji, T. Muthukumar, J.R. Juhna, S.V. Srinivasan, R. Suthanthararajan (India)	65
Microbial quality assessment of Beni Aamir and Beni Moussa groundwater (Tadla plain-Morocco) F.Z. Hafiane, L. Tahri, N. Nouayti (Morocco), M. El Jarmouni (France), R. Rochdi, K. Arifi, A.E. Idrissi, M. Fekhaoui (Morocco)	74
Investigation of the efficiency of removing turbidity, aluminium, and total organic compounds by using poly-aluminium chloride and chitosan from the water of Karoon River, Iran N. Orooji, M.J. Mohammadi, A. Takdastan, R. Feizi, A. Kargari (Iran)	82
Synthesis of PAN-nanofibers for the separation of aqueous pollutants and performance of the net-zero energy water treatment plant I.M. Alarifi, M.K. Uddin, A.B. Awan, Mu. Naushad, A.R. Alharbi (Saudi Arabia), R. Asmatulu (USA)	90
A field study of lined bioretention systems in removing nutrients from stormwater runoff Shumin Wang, Bin Zhang, Weiping Sima, Jiake Li, Jinchuan Tan (China)	109
Population dynamics and metabolic alternations of AOB in activated sludge under Cu shock loads Fan Ouyang, Dan Peng, Xiao Su (China)	119
Batch and circulated fluidized bed adsorption of nickel ions on algae: equilibrium, thermodynamic and mass transfer studies A.A. Mohammed, A.A. Najim (Iraq)	131
A microbial fuel cell integrated with an absorption column for the removal of hydrogen sulfide from anaerobic wastewater treatment D. Komolyothin, P. Painmanakul, B.B. Suwannasilp (Thailand)	141

Removal of hydrogen sulfide from water-based drilling fluid using titania/carbon nanotubes nano-hybrid: optimization, kinetics, and isotherms S. Khorshidi, S. Sabbaghi, R. Saboori (Iran)	154
A review on fluoride: treatment strategies and scope for further research D. Eunice Jayashree, G. Pooja, P. Senthil Kumar, G. Prasannamedha (India)	167
Application of synthesizing tri-metallic Zn and Ag co-doped TiO ₂ nano-photocatalyst by a one-step synthesis technique in treating water pollutants M. Ghorbanpour, A. Feizi (Iran)	187
Photocatalytic degradation of rolling emulsion wastewater over titanium dioxide suspensions Peng Jiang, Yun Li, Amanda Han, Xue-Qin Chen, Xiao-Long Zhou (China)	196
Removal of lead ion from aqueous solutions by adsorption onto phosphate-functionalized treated waste papers (PF-TWPs) A.H. Mahvi, M. Sarmadi, D. Sanaei, H. Abdolmaleki (Iran)	205
Biodegradability enhancement and pre-treatment of industrial estate wastewater by electro-Fenton process E. Asgari, M. Aghanaghad, H. Nourmoradi, B. Hashemzadeh, R. Aali (Iran)	217
Dielectric barrier discharge ionisation (DBDI) technology combined with coagulation-flocculation for wastewater treatment of pulp and paper industry Purwono, R.T. Satio, A. Syakur, N. Purnasari, S.P. Astuti (Indonesia)	224
Combined UV catalytic ozonation process on iron loaded peanut shell ash for the removal of methylene blue from aqueous solution A. Ikhlaq, F. Javed, A. Niaz, H.M.S. Munir (Pakistan), Fei Qi (China)	231
The influence of ozonation and sedimentation on water treatment plant sludge: evaluation of clarified water and thickened sludge K.F. Hedlund Ferrari, M. Maraschin, C.B. da Silva, A.C. Schneider, E. Carissimi (Brazil)	241
Oxidation-adsorption of arsenite contaminated water over ceria nanorods S. Suwannatrat (Thailand), D.Y.S. Yan (Hong Kong), J. Phanthasri, P. Khamdahsag, S. Wannapaiboon, V. Tanboonchuy (Thailand)	252
Degradation of tetracycline in Fenton and heterogeneous Fenton like processes by using FeNi ₃ and FeNi ₃ /SiO ₂ catalysts B. Barikbin, F.S. Arghavan, A. Othamani, A.H. Panahi, N. Nasseh (Iran)	262
In-situ growth of Zr _{1-0.5x} Cd _x W ₂ O ₈ on ZrW ₂ O ₈ /CdWO ₄ manufactured by electron beam irradiation with superior photocatalytic activity for degradation of tetracycline under visible light Renrui Sun, Wei Wang, Tianli Yang, Ren He, Jing Wang, Kehui Xue, Jun Zhou, Chun Long, Wenlei Wang (China)	275
Biodecolorization of Remazol dyes using biochar derived from <i>Ulva reticulata</i> : isotherm, kinetics, desorption and thermodynamic studies A.K. Priya, R. Gokulan, A. Vijayakumar, S. Praveen (India)	286
Adsorption properties of reactive dyes on the activated carbon from corn straw prepared by microwave pyrolysis Xiaoli Ren, Shangwen Wang, Yuqiang Jin, Defei Xu, Hongbing Yin (China)	296
Environmental applications of fine bubble generating apparatus with low energy and high treatment efficiency Yong-Jun Jung, Jae-Ouk Jung, Yuki Kamimoto, Kyungik Gil, Dong-Hyun Kim (Korea)	304
Optimal size estimation of water storage tank for upland crops Ju Ha Hwang, Hyung San Kim (Korea), M. Azam (Korea, Pakistan), Seung Jin Maeng (Korea)	310
Nonpoint source management area monitoring and assessment of management objectives achievement Jinsun Kim, Jiyeon Choi, Dong Seok Shin, Jong Mun Lee, Jaekwan Lee, Jichul Ryu (Korea)	323
Predicting the effect of impervious area change on water circulation rate in the Geum River watershed using HSPF modeling Jong Mun Lee, Jichul Ryu, Jiyeon Choi, Jae Hong Park, Jinsun Kim, Dong Seok Shin, Jaekwan Lee (Korea)	337
Comparative analysis of the photocatalytic removal of methylene blue and pyrene on TiO ₂ and WO ₃ /TiO ₂ particles J.A. Mendoza (Philippines), Dong Hoon Lee, Joo-Hyon Kang (Korea)	351
Impacts of bioenergy crop production and climate change on sediment management strategy at the watershed scale Hakkwan Kim (Korea), P.B. Parajuli (USA), Kyo Suh (Korea)	359

Smart control for micro-aeration toward sulfide removal in sewer systems at low costs Chun Yin Lau, Jianyu Guan, Ho-Yin Tse, Chi Shun Yeung, Shao-Yuan Leu (Hong Kong)	369
Ecological risk of pesticides in river water as determined by secular changes in species sensitivity distribution A. Moriya, K. Noro, A. Banno, Y. Yabuki, Y. Komai (Japan)	376
Contamination assessment of pollutants and sediments of abandoned mines using integrated pollution index (IPI) J. Akter, Jang Juwon, Jan Taesung, Kim Jeong Gyu, Hosik Lee (Korea)	383
Methodology for determining total phosphorus target water quality in total maximum daily loads Jae Hong Park, Dong Seok Shin, Jae Kwan Lee (Korea)	390
Assessment of suspended solid and particles removal efficiency for hybrid systems connecting a technical BMP device to low impact development technology Sung Min Cha, Taeyoon Kim, Sungsoon Hong, Hyun Suk Shin, Jong Bin Park, Soonchul Kwon, Na Young Kim, Dong Wan Kim, Seung Won Lee (Korea)	400
Probabilistic solution to rainwater harvesting system and its impact on climate change Inkyeong Sim, Sangdan Kim (Korea)	407
Source apportionment of PAHs in road sediments by CMB models: considering migration loss process Jiashen Feng, Ningning Song, Yingxia Li (China)	422
Assessment of microbial activity in LID facilities affecting nonpoint source pollutant treatment Jungsun Hong, F.K. Geronimo, Hyeseon Choi, Minsu Jeon, Reeho Kim, Lee-Hyung Kim (Korea)	432
Parameterising the diffuse pollution in a continental Mediterranean city A. Lastra, J. Suárez, J. Puertas, J. Anta, M. Ortega, J. Botello (Spain)	441
Utilization of berm technology for reducing sediment loads from construction sites N.J. Reyes, F.K. Geronimo, Hyeseon Choi, Minsu Jeon, Lee-Hyung Kim (Korea)	450
Author Index	459