



Evaluation of lead and COD removal from lead octoate drier effluent by chemical precipitation, coagulation–flocculation, and potassium persulfate oxidation processes A. Rabii, G.N. Bidhendi and N. Mehrdadi (Tehran, Iran)	1
Kinetics and equilibrium of cadmium removal from aqueous solutions by sorption onto synthesized hydroxyapatite N. Barka (Khouribga, Morocco), K. Ouzaouit (Marrakech, Morocco), M. Abdennouri, M. El Makhfouk (Safi, Morocco), S. Qourzal, A. Assabbane, Y. Ait-Ichou (Agadir, Morocco) and A. Nounah (Morocco).....	8
Recovery of <i>Bacillus thuringiensis</i> based biopesticides from fermented sludge by cross-flow microfiltration M. Chang, S. Zhou, Q. Sun (Beijing, China) T. Li (Nanjing, China) and J. Ni (Beijing, China)	17
Water scarcity in North Cyprus and solar desalination research: a review O. Phillips Agboola and F. Egelioglu (Turkey)	29
New chitosan/poly (acrylic acid) composite membrane for application in pervaporation dehydration of caprolactam solution Q. Li, W. Lin, T. Zhu, Y. Luo and P. Yu (P.R. China)	43
Fluxes in reverse osmosis of model acidic and alkaline transient effluents issued from skim milk filtration H. Bouzid (Mostaganem, Algeria), M. Rabiller-Baudry (Rennes Cedex, France), Z. Derriche (Oran, Algeria) and N. Bettahar (Oran, Algeria)	52
The feasibility of using <i>Rosa canina</i> galls as an effective new biosorbent for removal of methylene blue and crystal violet Esra Bağda (Sivas, Turkey)	63
Analysis of an evaporation–condensation desalination system in vacuum driven by geothermal energy P. Gao and G. Zhou (Jiangsu, China)	76
Photocatalytic degradation of wastewater containing acid red 1 dye by titanium dioxide: effect of calcination temperature U.G. Akpan and B.H. Hameed (Penang, Malaysia)	84
Variability and limits of the unified membrane fouling index: application to the reduction of low-pressure membrane fouling by ozonation and biofiltration N. Geismar (Montréal, Canada), P.R. Bérubé (Vancouver, Canada) and B. Barbeau (Montréal, Canada) .	91
Microcosm approach for brine impact assessment from seawater desalination on benthic assemblages S.J. Yoon and G.S. Park (Incheon, Korea)	102
Performance and modeling of zeolite adsorption for ammonia nitrogen removal J.-O. Kim (Gangwon-do, Korea), S. Kim (Busan, Korea) and N.-S. Park (Daejeon, Korea).....	113
Fouling and scaling reduction by pulsed electric field treatment as pretreatment for desalination J.-O. Kim, S.-P. Choi (Gangwon-do, Korea), H. Yoon (Incheon, Korea) and G.-T. Kim (Gyeonggi, Korea)	118
Effect on backwash cleaning efficiency with TDS concentrations of circulated water and backwashing water in SWRO membrane J.W. Nam, J.Y. Park (Suwon, Republic of Korea), J.H. Kim (Incheon, Republic of Korea), Y.S. Lee, E.J. Lee, M.J. Jeon, H.S. Kim and A. Jang (Suwon, Republic of Korea).....	124

Using macromolecules as osmotically active compounds in osmosis followed by filtration (OF) system S. Sarp, S. Lee (Gwangju, Korea), K. Park, M. Park (Gyeonggi-do, Korea), J.H. Kim and J. Cho (Gwangju, Korea)	131
Multi-objective optimization of cascade controller in combined biological nitrogen and phosphorus removal wastewater treatment plant H. Liu, K.-H. Chang and C.K. Yoo (Gyeonggi-Do, South Korea)	138
Parametric analysis and optimization of combined gas turbine and reverse osmosis system using refrigeration cycle I.J. Esfahani, A. Ataei, M. Kim, O. Kang and C. Yoo (Gyeonggi-Do, South Korea)	149
Characteristics of disinfection by-products reduction in the processes of drinking water treatment system using Nakdong river water Y.-J. Kim (Gimhae, Korea) and K.-S. Hyun (Sangju, Korea).....	159
A review of draw solutes in forward osmosis process and their use in modern applications L. Chekli, S. Phuntsho, H.K. Shon, S. Vigneswaran, J. Kandasamy and A. Chanan (Broadway, Australia)	167
External analysis-based fuzzy PLS model for prediction and monitoring in MBR T. Oh, H. Liu, M. Kim, S. Lee, M.-K. Yeo and C. Yoo (Gyeonggi-Do, South Korea)	185
Overview of pressure-retarded osmosis (PRO) process and hybrid application to sea water reverse osmosis process J. Kim, J. Lee and J.H. Kim (Gwangju, Korea).....	193
Simulation of brine discharge near sea farms in the Korea Strait Y.-J. Sun (Canberra, Australia), Y.-K. Cho (Seoul, Korea), K.-S. Park (Pohang, Korea) S.-M. Yoon and J.-K. Moon (Pohang, Korea).....	201
Time-series image analysis for investigating SWRO fouling mechanism M. Monruedee, S. Sarp (Gwangju, Korea), Y.G. Lee (Gyeongsangnam-do, Korea) and J.H. Kim (Gwangju, Korea).....	212
Fabrication and characterization of the chlorine-tolerant disulfonated poly(arylene ether sulfone)/ hyperbranched aromatic polyamide-grafted silica composite reverse osmosis membrane S.Y. Park, S.G. Kim, J.H. Chun, B.-H. Chun and S.H. Kim (Seoul, South Korea)	221
Novel thin-film composite membrane for seawater desalination with sulfonated poly(arylene ether sulfone) containing amino groups S.G. Kim, S.Y. Park, J.H. Chun, B.-H. Chun and S.H. Kim (Seoul, Korea)	230
Fluorescence spectrum-based biofouling prediction method for RO membrane systems S.-N. Hwang, W. Choi, H. Lim, J. Choi, H. Kim and I.S. Chang (Gwangju, Republic of Korea)	238
The performance of contact flocculation–filtration as pretreatment of seawater reverse osmosis S. Jeong, T.V. Nguyen, H.K. Shon and S. Vigneswaran (Broadway, Australia)	246
Electrocoagulation and crossflow microfiltration hybrid system: fouling investigation G. Sharma, H.K. Shon and S. Phuntsho (Broadway, Australia)	253
Effect of ion composition on nanofiltration rejection for desalination pretreatment J. Kaewsuk, D.Y. Lee, T.S. Lee and G.T. Seo (Gyeongnam, Republic of Korea)	260
Continuous determination of hydrogen peroxide formed in advanced oxidation and electrochemical processes T.-M. Hwang (Gyeonggi-Do, Korea), B.S. Oh (Seoul, South Korea), Y. Yoon, M. Kwon and J. Kang (Wonju, Korea)	267
Optimization of hybrid system consisting of forward osmosis and reverse osmosis: a Monte Carlo simulation approach S.-M. Park, J.-W. Koo, Y.-K. Choi, S. Lee, J. Sohn (Seoul, Korea) and T.-M. Hwang (Kyonggi-do, Republic of Korea)	274
Analysis of reverse osmosis system performance using a genetic programming technique S.-M. Park, J. Han, S. Lee, J. Sohn (Seoul, Korea), Y.-M. Kim, J.-S. Choi (Kyonggi-do, Korea) and S. Kim (Busan, Korea)	281

Design optimization of ultrafiltration membrane module for desalination applications Y.-J. Kim, T. Yun, J. Han, S. Lee (Seoul, Republic of Korea), P.-K. Park, B.-K. Hwang and J.-S. Park (Gyeonggi-Do, Republic of Korea).....	291
Changing perception of the value of urban water in Australia following investment in seawater desalination N. Palmer (Western Australia, Australia).....	298
Influence of solution chemistry on the surface heterogeneity of reverse osmosis membrane Y. Kim, S. Lee and S. Hong (Seoul, Republic of Korea).....	308
Application of osmotic backwashing in forward osmosis: mechanisms and factors involved C. Kim, S. Lee and S. Hong (Seoul, Republic of Korea).....	314
Performance enhancement of MBR operated with aerobic granules on membrane filterability improvement A. Jang (Gyeonggi-do, South Korea), N. Jang (Jeollabuk-do, South Korea), X. Ren (Beijing, P.R. China) and I.S. Kim (Gwangju, South Korea).....	323
Author Index	332