



The forward osmosis and desalination M.A. Darwish, H.K. Abdulrahim, A.S. Hassan, A.A. Mabrouk and A.O. Sharif (Doha, Qatar)	4269
Realistic power and desalted water production costs in Qatar M.A. Darwish, H.K. Abdulrahim and A.S. Hassan (Doha, Qatar)	4296
Ultra-low energy reverse osmosis with thermal energy recovery from photovoltaic panel cooling and TFC RO membrane modification H.D. Raval and S. Maiti (Bhavnagar, India)	4303
Microalgal process for treatment of high conductivity concentrates from inland desalination M.T. Myint, W. Hussein and A. Ghassemi (Las Cruces, NM, USA)	4313
Biodegradation of organic content in wastewater in fluidized bed bioreactor using low-density biosupport K. Haribabu and V. Sivasubramanian (Kozhikode, India)	4322
Treatment of distillery wastewater in an upflow anaerobic sludge blanket (UASB) reactor A.B. Saner (Nashik), A.K. Mungray and N.J. Mistry (Surat, India)	4328
Response surface modeling and optimization of upflow anaerobic sludge blanket reactor process parameters for the treatment of bagasse based pulp and paper industry wastewater R. Sridhar (Salem), V. Sivakumar and K. Thirugnanasambandham (Erode, India)	4345
Analysis of high-nitrate, high-salinity wastewater in an expanded granular sludge bed reactor and microbial community Runhua Liao (Jingdezhen and Nanjing), Yan Li (Nanjing), Jie Du (Jingdezhen), Aimin Li, Haiou Song (Nanjing), Zongyang Shen and Yueming Li (Jingdezhen, China)	4357
Hydrolytic acidification via rumen microorganisms and aerobic MBR to reduce contaminants in pulping midcourse wastewater Na Li, Wen-yao Jin and Feng-lin Yang (Dalian, China)	4365
Oxazole derivatives as corrosion inhibitors for 316L stainless steel in sulfamic acid solutions A.S. Fouda (El-Mansoura), M.A. Elmorsi, T. Fayed (Tanta) and I.A. El Said (El-Mansoura, Egypt)	4371
Structural characterization and water turbidity removing efficacy of <i>Portulaca</i> mucilage–alginate (PMA) beads K. Anuradha, P. Bangal and S. Sakunthala Madhavendra (Hyderabad, India)	4386
Pressure-driven membrane and ion exchange hybrid system for the treatment of wastewater containing sulfite and nitrite Haigang Li, Hongbin Cao and Chuanfang Yang (Beijing, China).....	4398
Increasing the productivity of pyramid solar still augmented with biomass heat source and analytical validation using RSM A. Senthil Rajan, K. Raja and P. Marimuthu (Ramanathapuram, India)	4406
Application for acrylonitrile wastewater treatment by new micro-electrolysis ceramic fillers Deyi Huang, Qinyan Yue, Kaifang Fu, Bingjie Zhang, Baoyu Gao, Qian Li and Yan Wang (Jinan, China)	4420
Preparation and performance of fly ash-based coagulants in chemically enhanced primary treatment of domestic wastewater Kai Hu (Nanjing), Qing-liang Zhao (Harbin), Wei Chen (Nanjing), Feng Tang (Harbin) and Hang Xu (Nanjing, China).....	4429
Kinetic coefficients for the domestic wastewater treatment using hybrid activated sludge process A. Noroozi, M. Farhadian and A. Solaimanyazar (Isfahan, Iran)	4439
Influence of the ratio of resin to polymeric binder on the heterogeneity of cation-exchange membranes Sang-Don Han, Hong-Joo Lee and Seung-Hyeon Moon (Gwangju, Korea).....	4447
Efficiency and kinetics of organics removal from landfill leachate by adsorption onto powdered and granular activated carbon D. Kulikowska, K. Bernat, K. Parszuto and P. Sulek (Olsztyn, Poland)	4458
Removal of highly toxic components from hexanitrobenzil wastewater by vacuum distillation Guo-Hua Liu, Ran Che, Quanlin Zhao and Zhengfang Ye (Beijing, China)	4469

Application of gas/liquid two-phase flow in cross-flow microfiltration of oil-in-water emulsion; permeate flux and fouling mechanism analysis A. Fouladitajar, F. Zokaei Ashtiani, B. Valizadeh, S.B. Armand and R. Izadi (Tehran, Iran).....	4476
Drinking water quality: comparative study of tap water, drinking bottled water and point of use (PoU) treated water in Bandar-e-Abbas, Iran K. Dindarloo (Bandar Abbas), H.R. Ghaffari (Bandar Abbas and Tehran), Z. Kheradpisheh (Yazd), V. Alipour, A. Ghanbarnejad, Y. Fakhri and B. Goodarzi (Bandar Abbas, Iran).....	4487
Synthesis of high-performance nitrogen-containing porous carbon and adsorption properties towards metal ions Wen-Xia Zhou, Tuo-Ping Hu, Jian-Feng Gao, Xi Chen, Wei-Guang Ping (Taiyuan, China), Chin-Chuan Wei and Fuqiang An (Edwardsville, IL, USA).....	4494
Remediation effects of used brick powder on nutrient-laden sediment Chenrong Jia (Wuhan and Shenzhen), Gu Li (Wuhan), Yanran Dai (Wuhan and Shanghai), Feihua Wang and Wei Liang (Wuhan, China)	4502
Kinetic, equilibrium and selectivity studies of heavy metal ions (Pb(II), Co(II), Cu(II), Mn(II), and Zn(II)) removal from water using synthesized C-4-methoxyphenylcalix[4]resorcinarene adsorbent S.F. Alshahateet, A.G. Jiries, S.A. Al-Trawneh (Mutah, Jordan), A.S. Eldouhaibi (Tripoli, Lebanon) and M.M. Al-Mahadeen (Mutah, Jordan)	4512
Effective removal of Cu ²⁺ ions from aqueous solution in fixed-bed micro column using nanomagnetite-loaded poly (acrylamide-co-maleic acid) hydrogel as adsorbent N. Sharma and A. Tiwari (Durg, India).....	4523
Chromium(VI) removal from aqueous solution using a new synthesized adsorbent Qiuyi Wang, Nan Chen, Yang Yu, Chuanping Feng, Qian Ning and Weiwu Hu (Beijing, China)	4537
Arsenic removal from contaminated drinking water by electrocoagulation using hybrid Fe–Al electrodes: response surface methodology and mechanism study Peipei Song, Zhaohui Yang, Haiyin Xu, Jing Huang, Xia Yang, Feng Yue and Like Wang (Changsha, China)	4548
Removal of lead (II) from aqueous solutions by adsorption onto activated carbons prepared from coconut shell M. Caccin, M. Giorgi, F. Giacobbo, M. Da Ros, L. Besozzi and M. Mariani (Milan, Italy)	4557
Biosorption of lead ions (Pb ²⁺) from simulated wastewater using residual biomass of microalgae D. Das (Kolkata, India), S. Chakraborty (Kolkata, India and Rende, Italy), C. Bhattacharjee and R. Chowdhury (Kolkata, India)	4576
Investigation of Pb(II) adsorption on a novel activated carbon prepared from hazelnut husk by K ₂ CO ₃ activation M. Imamoglu, H. Şahin, Ş. Aydın, F. Tosunoğlu (Sakarya), H. Yılmaz (Isparta) and S.Z. Yıldız (Sakarya, Turkey)	4587
Pre-oxidation effect on ammoxidation of activated carbon and its influence on Cu(II) adsorption M.H. Mahaninia (Saskatoon, Canada), T. Kaghazchi, M. Soleimani, P. Rahimian and A. Esfandiari (Tehran, Iran)	4597
Hybrid membrane adsorbents: preparation and their adsorptions for copper(II) ions Keyan Hu, Kai Wang, Junsheng Liu and Qiang Dong (Hefei, China)	4606
Selective extraction of cobalt ions through polymer inclusion membrane containing Aliquat 336 as a carrier Y. Yıldız, A. Manzak (Sakarya, Turkey) and O. Tutkun (Bishkek, Kyrgyzstan).....	4616
Simultaneous biosorption of the two synthetic dyes, Direct Red 89 and Reactive Green 12 using nonliving macrophyte <i>L. gibba</i> L. S. Guendouz, N. Khellaf (Annaba, Algeria), H. Djelal (Bruz and Rennes, France) and M. Ouchefoun (Annaba, Algeria)	4624
Decolorization of Methylene Blue and Congo Red by attapulgite-based heterogeneous Fenton catalyst Ting Zhang and Zhong-Ren Nan (Lanzhou, China)	4633
Alkali-clearing process optimization of the newly synthesized disperse dye and its promising removal from wastewater using electrocoagulation M. Dodangeh, E. Pajootan, M. Mohammadian (Kashan, Iran), N.S. Allen (Manchester, UK) and R. Eskandari Fard (Kashan, Iran)	4641
Removal of textile dye Reactive Blue 59 by using Nb ₂ O ₅ as a photocatalyst S.D. Marathe and V.S. Shrivastava (Nandurbar, India)	4652

Direct Blue 71 removal by electrocoagulation sludge recycling in photo-Fenton process: response surface modeling and optimization M. Moradi, A. Eslami (Tehran) and F. Ghanbari (Ahvaz, Iran)	4659
Performance and mechanism study on phosphate adsorption onto activated carbon fiber loading lanthanum and iron oxides Ling Zhang, Mengxue Li, Yan Gao, Jianyong Liu and Yunfeng Xu (Shanghai, China)	4671
Modification and use of biochar from wheat straw (<i>Triticum aestivum</i> L.) for nitrate and phosphate removal from water Ji-hui Li, Guo-hua Lv, Wen-bo Bai (Beijing, China), Qi Liu (Beijing, China and Gembloux, Belgium), Yuan-cheng Zhang (Dongying) and Ji-qing Song (Beijing, China)	4681
Denitrification of nitrate-contaminated groundwater in an anoxic rotating biological contactor: a case study S.A. Mirbagheri, S. Ahmadi and N. Biglari-Joo (Tehran, Iran)	4694
Low pressure RO for boron elimination: impact of pH on the degree of rejection of boron and monovalent ions S. Agashichev and E. Osman (Abu Dhabi, UAE).....	4701
Optimization of photocatalytic degradation of b-naphthol using nano TiO ₂ -activated carbon composite H. Ijadpanah-Saravi (Tehran), S. Dehestaniathar (Sanandaj), A. Khodadadi and M. Safari (Tehran, Iran)	4708
Removal of ammonium ions from aqueous solutions using zeolite synthesized from red mud Ying Zhao, Yongchao Niu, Xiang Hu, Beidou Xi, Xing Peng, Wenfang Liu, Weixiong Guan and Lei Wang (Beijing, China)	4720
Comparative study on Pb(II), Cu(II), and Co(II) ions adsorption from aqueous solutions by arborvitae leaves Jie Shi, Zhendong Fang, Zhiwei Zhao (Chongqing), Tianyi Sun and Zhijie Liang (Harbin, China)	4732
Author Index.....	4740