

Contents

Volume 57 Issue 45

Geometrical variations in solar stills for improving the fresh water yield — A review R. Sathyamurthy, D.G. Harris Samuel, P.K. Nagarajan and T. Arunkumar (Chennai, India).....	21145
Super fast membrane bioreactor—transition to extremely low sludge ages for waste recycle and reuse with energy conservation D. Orhon, S. Sözen, S. Teksoy Basaran and B. Alli (Istanbul, Turkey)	21160
Effect of soluble and insoluble gas bubbling methods on ultrafiltration fouling control M. Hashemi Shahraki, A. Maskooki and A. Faezian (Mashhad, Iran)	21173
Modeling of activated sludge process using artificial neuro-fuzzy-inference system (ANFIS) R. Maachou, A. Lefkir, A. Khouider and A. Bermad (Algiers, Algeria)	21182
Impact of quarry sand exploitation on surface water flow quality— case of El Harrach stream channel, Algeria R. Kheira and R. Boualem (Blida, Algeria)	21189
The integration of desalination plants and mineral production N.F. Attia, M.A. Jawad and A. Al-Saffar (Safat, Kuwait)	21201
Numerical investigations: basin materials of a single-basin and single-slope solar still P. Malaiyappan and N. Elumalai (Chennai, India).....	21211
Effect of parabolic solar energy collectors for water distillation T. Arunkumar (Chennai and Coimbatore), R. Velraj (Chennai, India), A. Ahsan (Selangor, Malaysia), A.J.N. Khalifa (Baghdad, Iraq), S. Shams (Bandar Seri Begawan, Brunei), D. Denkenberger (Nashville, TN, USA) and R. Sathyamurthy (Chennai, India).....	21234
Application of an aquatic plant ecosystem for swine wastewater polishing: a full-scale study C.C. Chien (Tainan), Z.H. Yang (Kaohsiung, Taiwan), W.Z. Cao (Xiamen, China), Y.T. Tu and C.M. Kao (Kaohsiung, Taiwan)	21243
Cascade control of effluent nitrate and ammonium in an activated sludge process Hongbin Liu (Nanjing, China and Yongin, Korea) and ChangKyoo Yoo (Yongin, Korea)	21253
Effluent limitations through best practicable control technology: evaluation of the semiconductor and electronic component manufacturing industry Jaehoon Kim (Incheon), Hyun Woo Kim (Anyang), Jinsoo Shin and Soon Ju Yu (Incheon, Korea)	21264
Microstructure evolution and properties of YSZ hollow fiber microfiltration membranes prepared at different suspension solid content for water treatment Xiaozhen Zhang (Jingdezhen, China and Brisbane, Australia), Shuaifeng Suo, Yuhua Jiang, Qibing Chang (Jingdezhen, China), Guozhao Ji (Brisbane, Australia) and Xingqin Liu (Hefei, China)	21273
Microstructural and antibacterial properties of silver nanoparticle-decorated porous polyurethane surface for water purification M. Nadafan, R. Malekfar, A. Izadi-Darbandi (Tehran) and Z. Dehghani (Neyshabur, Iran)	21286
Treatment of TNT red water by chemical-modified carbon adsorbent prepared from cheap raw materials of pine tree wood H.R. Pouretedal, S. Damiri, M. Alikhasti and H. Mahmoodi (Shahin-Shahr, Iran)	21294
Pharmaceutical adsorption from the primary and secondary effluents of a wastewater treatment plant by powdered activated carbon Jingyi Hu, Ran Shang (Delft, The Netherlands), M. Frolova (Riga, Latvia), B. Heijman and L. Rietveld (Delft, The Netherlands)	21304
Feasibility study of flowback-produced water treatment using direct-contact membrane distillation Guixing Rao (Milwaukee, WI) and Ying Li (College Station, TX and Milwaukee, WI, USA)	21314
Effective reuse of electroplating rinse wastewater by combining calcined oyster shell powder with H ₂ O ₂ /UV process Hsing Yuan Yen and Tsung Kun Yang (Kaohsiung City, Taiwan)	21328

Data assessment for water demand and supply balance on the island of Santa Cruz (Galápagos Islands) M.F. Reyes, N. Trifunović, S. Sharma and M. Kennedy (Delft, The Netherlands)	21335
Effect of inoculum source and effluent recycle on the start-up performance of a modified anaerobic inclining-baffled reactor treating recycled paper mill effluent H.M. Zwain, H. Abdul Aziz and I. Dahlan (Nibong Tebal, Malaysia)	21350
Analysis of the filtration curve and the effect of temperature on silt density index (SDI) K. Takeuchi, K. Matsui, Y. Ito (Yokohama), Y. Goda, I. Hamano (Kurashiki) and N. Ukawa (Hiroshima, Japan)	21364
Analysis of variables affecting mixed liquor volatile suspended solids and prediction of effluent quality parameters in a real wastewater treatment plant M. Bagheri, S.A. Mirbagheri, M. Ehteshami (Tehran), Z. Bagheri and A.M. Kamarkhani (Kermanshah, Iran)	21377
Facile synthesis of PVA/CNTs for enhanced adsorption of Pb ²⁺ and Cu ²⁺ in single and binary system Lingyun Jing and Xiaoli Li (Lanzhou, China)	21391
Contributions of different fractions of extracellular polymeric substances from waste-activated sludge to Cu(II) biosorption Lingzhan Miao, Chao Wang, Jun Hou, Peifang Wang, Yanhui Ao, Yi Li, Bowen Lv, Yi Xu and Guoxiang You (Nanjing, China)	21405
A comparative study of removal of methyl tertiary-butyl ether (MTBE) from aquatic environments through advanced oxidation methods of H ₂ O ₂ /nZVI, H ₂ O ₂ /nZVI/ultrasound, and H ₂ O ₂ /nZVI/UV M.R. Samaei, H. Maleknia and A. Azhdarpoor (Shiraz, Iran)	21417
Solar photocatalytic activity of indium sulfide nanocrystal and degradation of the tetracycline by In ₂ S ₃ Cuiling Ai (Fuzhou and Shangluo), Qian Wang (Fuzhou), Yingjie Lei (Shangluo and Tianjin) and Xiangwen Shao (Fuzhou, China)	21428
Degradation of ethylthionocarbamate by activated sludge coupled with interior microelectrolysis Shaohua Chen, Dongyun Du, Yixue Wu and Ruirui Xing (Wuhan, China)	21437
Adsorption of ammonia from wastewater using low-cost bentonite/chitosan beads M. Gaouar Yadi, B. Benguella, N. Gaouar-Benyelles and K. Tizaoui (Tlemcen, Algeria)	21444
Isolation of a thermophilic aerobic denitrifier and characterization for its denitrification performance Wei Liang (Zhuhai) and Shaobin Huang (Guangzhou, China)	21455
Changes of abundance and diversity of ammonia-oxidizing archaea (AOA) and bacteria (AOB) in three nitrifying bioreactors with different ammonia concentrations Jingfeng Gao, Xiaoyan Fan, Guixia Wu, Ting Li and Kailing Pan (Beijing, China)	21463
Analysis of phosphate removal from aqueous solutions by hydrocalumite Jeong-Woo Son, Jae-Hyun Kim, Jin-Kyu Kang, Song-Bae Kim, Jeong-Ann Park, Chang-Gu Lee, Jae-Woo Choi and Sang-Hyup Lee (Seoul, Korea)	21476
Optimization and batch studies on adsorption of malachite green dye using rambutan seed activated carbon M.A. Ahmad, N.S. Afandi (Nibong Tebal, Malaysia), K.A. Adegoke (Ogbomoso, Nigeria) and O.S. Bello (Nibong Tebal, Malaysia and Ogbomoso, Nigeria)	21487
Comparative study of carbon black and activated carbon adsorbents for removal of carbofuran from aqueous solution A.K.M. Mydul Islam, Jeong-In Hwang, Sung-Eun Lee and Jang-Eok Kim (Daegu, Korea)	21512
Nanostructured adsorbent (MnO ₂): Synthesis and least square support vector machine modeling of dye removal N.M. Mahmoodi, Z. Hosseiniabadi-Farahani and H. Chamani (Tehran, Iran)	21524
UV-irradiated carbon nanotubes synthesized from fly ash for adsorption of Congo Red dyes in aqueous solution N. Salah, S.S. Habib (Jeddah, Saudi Arabia), Z.H. Khan (New Delhi, India), R. Kumar and M.A. Barakat (Jeddah, Saudi Arabia)	21534
Decolorization and decontamination of textile wastewater by gamma irradiation in presence of H ₂ O ₂ M.A.R. Bhuiyan, A. Shaid (Gazipur and Dhaka), M.A. Hossain and M.A. Khan (Dhaka, Bangladesh)	21545
Photocatalytic decolorization of bromothymol blue using biogenic selenium nanoparticles synthesized by terrestrial actinomycete <i>Streptomyces griseobrunneus</i> strain FSHH12 Atefeh Ameri, M. Shakibaie, Alieh Ameri (Kerman), M.A. Faramarzi (Tehran), B. Amir-Heidari and H. Forootanfar (Kerman, Iran)	21552

M-Al-SO ₄ layered double hydroxides (M=Zn, Mg or Ni): synthesis, characterization and textile dyes removal efficiency F.Z. Mahjoubi (Khouribga), A. Khalidi (Mohammedia), M. Abdennouri and N. Barka (Khouribga, Morocco)	21564
Decolorization of textile wastewater by dye-imprinted polymer B. Okutucu and S. Hamarat Sanlier (Izmir, Turkey)	21577
Biotransformation of mixture of dyes by enriched bacterial consortium ASD S. Chattaraj, J. Johnson and D. Madamwar (Gujarat, India)	21585
Cr K-edge X-ray absorption and FTIR spectroscopic study on the reaction mechanisms of Cr(III) and Cr(VI) with lignin Yu-Chi Lin (Taichung) and Shan-Li Wang (Taipei, Taiwan)	21598
Influence of pH on cadmium, copper, and lead removal from wastewater by steel slag F.M. Francisca and D.A. Glatstein (Cordoba, Argentina)	21610
Adsorptions of Cd(II) and Pb(II) in aqueous solution by rice-straw char I-Hui Liao, Jang-Hung Huang (Taichung), Shan-Li Wang (Taipei), Mei-Ping Cheng (Tainan) and Jen-Chyi Liu (Taichung, Taiwan)	21619
Study on lead ion wastewater treatment of self-assembled film Chunling Lin (Xi'an), Biao Fan (Changsha), Jiao Xia Zhang (Zhenjiang), Xu Yang and Hao Zhang (Xi'an, China)	21627
Development of a solvent extraction system with 4-heptylaminopyridine for the selective separation of palladium(II) from synthetic mixtures, catalysts and water samples B.T. Khogare (Jath and Satara), M.A. Anuse (Kolhapur), P.B. Piste (Satara) and B.N. Kokare (Jath, India)	21634
Performance evaluation of montmorillonite and modified montmorillonite by polyethyleneimine in removing arsenic from water resources A. Nadali, M. Khoobi, R. Nabizadeh, S. Naseri and A.H. Mahvi (Tehran, Iran)	21645
Parametric, equilibrium, and kinetic study of the removal of salt ions from Ghanaian seawater by adsorption onto zeolite X B. Kwakye-Awuah, E. Von-Kiti, I. Nkrumah (Kumasi, Ghana), R. Erdoo Ikyreve (Markudi, Nigeria), I. Radecka and C. Williams (Wolverhampton, UK)	21654
Author Index	21664