



Contents

Volume 158

Development of empirical relations to compute the heat transfer coefficients for distiller operating in different operating modes M.K. Gaur, G.N. Tiwari, P. Singh, A. Kushwah (India)	1
Assessment of cockle shells, walnut shells, and ginkgo shells as filter media for low impact development technologies Minsu Jeon, Jungsun Hong, F.K.F. Geronimo, Hyeseon Choi, Lee-Hyung Kim (Korea)	11
Is nanofiltration better than reverse osmosis for removal of fluoride from brackish waters to produce drinking water? V.B. Brião, F. Cuenca, A. Pandolfo, D.P.C. Favaretto (Brazil)	20
Water environmental risk assessment and regionalization in southeast coastal basins of China Wenting Zhang, Yongzhi Liu (China)	33
Improvement of leachate quality and waste stabilization in pilot-scale bioreactor landfills containing geotextile filters and sewage sludge C. Yaman (Saudi Arabia)	41
Improved sludge dewaterability by combining SDS pre-treatment conditioning with PDMDAAC flocculation Jinghui Zhang, Hong Yang, Lian Yang, Wei Li, Lei Xu, Jiawei Wang (China)	59
Removal of sulfamethoxazole in aqueous solution by two activated carbons from secondary sludge and biomass C.E. Rodríguez-Martínez, E. Gutiérrez Segura, C. Fall, A. Colín-Cruz (Mexico)	67
Performance of co-composting waste activated sludge and aged refuse Mang Lu (China)	79
Combination of solar advanced oxidation processes and biological treatment strategy for the decolorization and degradation of pulp and paper mill wastewater G. Gopalakrishnan, A. Somanathan, R.B. Jeyakumar (India)	87
Simultaneous nitrification and denitrification using a novel up-flow bio-electrochemical reactor Qi Tang, Meng Zheng, Yanqing Sheng (China), R.J.G. Mortimer (UK)	97
Nitrogen removal performance and microorganism community of an A/O-MBBR system under extreme hydraulic retention time Xing-peng Liu, Hui-qiang Li (China)	105
Analysis on the fractionation of heavy metals in a tree box filter treating urban runoff M.C. Maniquiz-Redillas (Philippines), F.K.F. Geronimo, Lee-Hyung Kim (Korea)	114
Detoxification of Cr(VI) using biochar supported Cu/Fe bimetallic nanoparticles Fengli Shao, Shaoyu Zhou, Jiaxin Xu, Qiong Du, Jianqiu Chen, Jingge Shang (China)	121
Spatial distribution, enrichment and geo-accumulation of heavy metals in surface sediments near urban and industrial areas in the Persian Gulf M. Seifi, A.H. Mahvi, S.Y. Hashemi, H. Arfaeinia, H. Pasalari, A. Zarei, F. Changani (Iran)	130
Potential of Saudi natural clay as an effective adsorbent in heavy metals removal from wastewater M.I. Khan, M.K. Almesfer, M. Danish, I.H. Ali (Saudi Arabia), H. Shoukry (Egypt), R. Patel, J. Gardy (UK), A.S. Nizami, M. Rehan (Saudi Arabia)	140
Cr(III) removal from tannery effluents using silica obtained from rice husk and modified silica M. Gutiérrez-Valtierra, C. Salazar-Hernández, J.M. Mendoza-Miranda, E. Elorza-Rodríguez, M.J. Puy-Alquiza, M. Caudillo-González, M.M. Salazar-Hernández (Mexico)	152
Adsorption of Cu(II) and Pb(II) from aqueous solutions onto a metakaolin-based geopolymer Peifei Ding, Weifeng Song, Chao Wang, Zefeng Yu (China)	164
Reactive ceramic pellets incorporated iron for removing As(III), As(V), and Cr(VI) from aqueous solutions Sunwon Rha, Yun Sik Gong, Ho Young Jo (Korea)	174

Lead and copper scavenging from aqueous solutions using <i>Eucalyptus camaldulensis</i> derived activated carbon: equilibrium, kinetics and sorption mechanism M. Shafiq, A.A. Alazba (Saudi Arabia), M.T. Amin (Saudi Arabia, Pakistan)	187
The synthesis of sodium alginate composites and their removal performances toward Pb ²⁺ and Cd ²⁺ Yan Zhang, Feng Liang, Wenwen Qiao, Zhan Chen, Meng Li, Pingge Dian (China)	199
Simultaneous adsorption of heavy metal ions (Cu ²⁺ and Cd ²⁺) from aqueous solutions by magnetic silica nanoparticles (Fe ₃ O ₄ @SiO ₂) modified using EDTA A. Esrafil, S. Bagheri, M. Kermani, M. Gholami, M. Moslemzadeh (Iran)	207
Contribution of remote sensing and geochemistry approaches to identify hydrogeological interconnections between Sminja and Oued Rmel Aquifer System (SORAS) (North-eastern Tunisia) M. Ameer, F. Hamzaoui-Azaza, S. Gannouni, M. Gueddari (Tunisia)	216
Assessment of the influence of urban stormwater runoff on the growth of <i>Spiraea prunifolia</i> var. <i>simpliciflora</i> Hyeseon Choi, F.K. Geronimo, Jungsun Hong, Lee-Hyung Kim (Korea)	225
Adsorptive removal of phenol from aqueous solutions using chemically activated rice husk ash: equilibrium, kinetic, and thermodynamic studies A. Jonidi Jafari, A. Alahabadi, M.H. Saghi, Z. Rezai, A. Rastegar, M. Sahib Zamani (Iran), P. Singh (India), A. Hosseini-Bandegharai (Iran)	233
Comparison treatment of cyanide by chemical precipitation, Fenton and fluidized-bed Fenton process with suspended carrier coated iron oxide: parameter optimization and mechanism Jiawei Tang, Xuelu Shi, Chao Sun, Honglei Zhuang, Ke Ning, Chunhui Zhang (China)	245
Oxovanadium catalyst based on nano-porous carbon xerogel: an efficient heterogeneous nano-catalyst for aerobic oxidation of olefins T. Mokary Yazdely, M. Ghorbanloo, H. Hosseini-Monfared (Iran)	256
Preparation and characterization of magnetite modified nanoparticles with <i>p</i> -benzoquinone-ethylenediamin for adsorption of humic acid from aqueous solution S. Beiki, E. Moniri, A.H. Hassani, H.A. Panahi (Iran)	266
Enhancing phosphate adsorption by novel calcium-silicate composites: batch and column studies Dan Jiang, Y. Amano, M. Machida (Japan)	280
Removal of phosphate from aqueous solutions using granular ferric hydroxide process optimization by response surface methodology M. Yousefi, R. Nabizadeh, M. Alimohammadi, A.A. Mohammadi, A.H. Mahvi (Iran)	290
Preparation of poly[3-(methacryloylamino) propyl] trimethylammonium chloride coated mesh for oil–water separation Jeng-Yi Wu, Chao-Wei Huang, Ping-Szu Tsai (Taiwan)	301
Using FEEM-PARACFAC to characterize metabolic organic components from P17 and NOX strains after AOC assay Hsiao-Jung Ho, Jing-Wen Cao, Chih-Ming Kao, Wen-Liang Lai (Taiwan)	309
Synthesis of porous iron – zirconium mixed oxide fabricated ethylene diamine composite for removal of cationic dye R. Kumari, S. Dey (India)	319
Adsorption of Methylene Blue onto nano SBA-15 mesoporous material from aqueous media: kinetics, isotherms and thermodynamic studies Qing- Zhou Zhai, Yuan Dong, Heng Liu, Qing-Shuang Wang (China)	330
Optimization of methylene blue biosorption and mass transfer resistance on <i>Gardenia carinata</i> activated carbon E.H. Ezechi, K. Muda (Malaysia)	343
Preparation of granular red mud supported zero-valent iron for Crystal Violet removal from aqueous solution Yufeng Du, Min Dai, Jiangfei Cao, Jiwei Liu, Changsheng Peng (China)	353
Central composite design for the optimization of Basic Red V degradation in aqueous solution using Fenton reaction A. Jaafar, A. Driouch, Z. Lakbaibi, H. Ben El Ayouchia, K. Azzaoui, A. Boussaoud (Morocco), S. Jodeh (Palestinian Authority)	364

Decolorization of azo dye Everdirect Supra Red BWS in an aqueous solution by heat-activated persulfate: optimization using response surface methodology M.S. Tunç (Turkey)	372
Remediation of methyl green dye from aqueous solution via adsorption and degradation using silica gel modified with hydrated zinc oxide catalyst N.M.R. Mahmoud, M.M. El-Moselhy, M.A. Alkhaldi (Saudi Arabia)	385
Author Index	398