

Contents

Volume 204

Daily exergy analysis of passive solar still for maximum yield R.G. Singh, G.N. Tiwari (India)	1
Pareto-optimization of MSF-OT/TVC desalination plant using surface response methodology and genetic algorithm A. Sellami, M. Ben Ali, L. Kairouani (Tunisia)	10
The commissioning of absorption heat transformer for water distillation using solar panels S.G. Perez, A. Huicochea, G. Urquiza, A.H. Hernández, J. Siqueiros (Mexico)	22
Effect of silica fouling on RO membranes used for the desalination of Kuwait brackish water R. Alazmi, M. Alazemi, A.A. Alanezi, A. Alhazza (Kuwait)	33
Recovery of filtration performance by steam cleaning with a low NaOCl concentration in a ceramic membrane process Sun-A An, Joon-Seok Kang, Jeong-Eun Lee, Soyeon Kang, Han-Seung Kim (Korea)	40
Evaluation of the operation seawater and brackish water desalination system using two-pass nanofiltration C. Vargas, R. Bórquez (Chile)	50
New simplification into NSF-WQI index to asses El Abid River water quality – Morocco I. Karaoui, A. Arioua, A. Boudhar, D. Elhamdouni, K.A. Ouhamchich, A.E.A. Idrissi, M. Hssaisoune (Morocco)	59
Recycling of discharged wastewater for drinking purpose: a case study in Guna water treatment plant, Ethiopia A.A. Ayalew, T.T. Wolelaw (Ethiopia)	69
Facile preparation of P84® polyimide affinity membrane with high adsorption of bilirubin Runlin Han, Xiaobing Liu, Min Chen, Xufeng Ma, Yuhang Zhang, Yan Sui (China)	82
Mixed matrix polyethersulfone tight ultrafiltration (TUF) membrane with improved dye removal by physical blending of 2D MoS ₂ Huali Tian (China), Xing Wu (Australia), Kaisong Zhang (China)	93
Electrocoagulation and ozonation: A hybrid technique to treat colored effluents from the textile industry G.H. Bracher (Brazil), A. Martín-Domínguez, S.P. Castrejón, A.M. Brito (Mexico), E. Carissimi (Brazil)	107
Effective and selective removal of anionic dye-based on wasted magnetic chitosan immobilized cellulase beads Lei Hu, Chao Yang, Limin Zang (China), Qifan Liu, Jianhui Qiu (Japan), Jun Yang, Xuan Qiao, Xue Yang, Huihao Li (China)	114
Fabrication and characterization of cerium oxide nanoparticles for the removal of naphthol green B dye A.A. Ali, S.R. El-Sayed, S.A. Shama, T.Y. Mohamed, A.S. Amin (Egypt)	124
Physicochemical characterization of La-doped g-C ₃ N ₄ for degradation of phenol and organic dye A. Bouzidi (Tunisia), M.S.A. Hussien (Egypt), H.S.M. Abd-Rabboh, A.A.H. Abdelrhim, I.S. Yahia (Saudi Arabia, Egypt), N.S. Awwad (Saudi Arabia)	136
Waste of pine seeds as bio-removal agent for methylene blue from aqueous solution: regeneration and single-stage batch design A. Mohmoud (Saudi Arabia, Qatar), F. Kooli (Saudi Arabia), Yan Liu (Singapore)	144
Application of Fenton and photo-Fenton process for decolorization of Direct Red 80 dye from synthetic wastewater M.S.H. Lori, M.M. Amin, M. Kamranifar, A. Fatehizadeh, M.R. Zare, M. Ghasemian, E. Taheri (Iran)	155
Artificial neural network and genetic algorithm for modeling and optimization of photocatalytic removal of aquatic dye by g-C ₃ N ₄ /N-TiO ₂ nanoparticles S. Taherkhani, L. Ghalamchi, F. Mohammadi (Iran)	164

Facile nitric acid activation of carob seeds for efficient recovery of heavy metals from water M. Farnane, A. Machrouhi, M. Khnifira, M. Barour, R. Elmoubarki, M. Abdennouri, H. Tounsadi, S. Qourzal, N. Barka (Morocco)	174
An efficient miniaturised flow cell loaded with magnetic nanoparticles for continuous removal of heavy metal ions H.A. Yusuf, Z.M. Redha, S. Zia, Z. Sohail (Bahrain), K. Kombaiah (India), M. Bououdina (Bahrain), J.J. Vijaya (India)	189
The influence of coagulation mechanism on coagulation effects under different Al-based coagulants conditions Yonglei Wang, Ya'nan Li, Wenhao Wang, Liping Tian, Ruibao Jia, Wuchang Song, Ling Ju (China)	204
Copper and nickel removal from aqueous solutions using functionalized polyacrylonitrile fibers: equilibrium, kinetic, and thermodynamic studies H. Bouchoum, F. Akoh, M. El Bouchti (Morocco), A. Jada (France), M. Tahiri, O. Cherkaoui (Morocco)	213
Efficient removal of Cu(II) and Zn(II) from aqueous solution and real acid mine drainage by natural vermiculite and kaolinite A. Farsi, M. Aghasi, A. Esmaeili, H. Eslami (Iran)	224
Experimental results and optimization via design of experiment (DOE) of the copper ion recovery from aqueous solutions using emulsion liquid membrane (ELM) method M. Darami Asl, I. Salahshoori (Iran), A. Seyfaee (Australia), A. Hatami, A.A. Golbarari (Iran)	238
Synthesis of xanthated chitosan beads for fast and efficient recovery of precious Ce(III) ions from aqueous solutions M.A.K.M. Hanafiah, N.F.M. Ariff, S. Ibrahim, W.S.W. Ngah, Z.M. Hussain (Malaysia)	257
Kinetic and thermodynamic analysis on the abolition of toxic metals from wastewater using activated carbon produced from compost waste S. Subburaj, P. Senthil Kumar (India)	270
Kinetic, equilibrium and thermodynamic studies for adsorptive removal of cobalt ions by rice husk from aqueous solution S. Zafar (Pakistan), M.I. Khan (Pakistan, China), H. ur Rehman (Pakistan), J. Fernandez-Garcia (UK), S. Shahida, P. Prapamonthon (Pakistan), M. Khraisheh (Thailand), A. ur Rehman, H.B. Ahmad, M.L. Mirza, N. Khalid, M.H. Lashari (Pakistan)	285
Removal of chromium (III) ions from aqueous solutions using different types of hydroxyapatites I. Zinicovscaia (Russia, Romania, Moldova), N. Yushin, D. Grozdov (Russia), I. Humelnicu, D. Humelnicu (Romania), T. Mitina (Moldova)	297
Temperature, pH and Cr(VI) ions sensing with green synthetic carbon dots Kuan Luo, Runmin Huang, Jingang Yu, Xinyu Jiang (China)	306
Adsorption molybdate ions using nanoscale zero valent iron-incorporated mesoporous carbons Chen-Chia Huang, Si-Hao Syu (Taiwan)	317
Adsorption of high concentration perchlorate from aqueous solution onto Mg/Fe magnetic hydrotalcite calcined product (MAG@CHT): kinetics and isotherm study Yongde Liu, Zhaojun Chen, Pengliang Guo, Yahui Shi, Jing Chen, Qiaochong He, Dongjin Wan (China)	328
Investigation on the simultaneous removal of COD and phosphorus from saponification effluent in rare-earth separating process by Fenton oxidation and chemical precipitation Xiaoyan Xiang, Hao Liu, Wentang Xia, Jianguo Yin, Xiaoli Yuan (China)	340
Lanthanum recovery from aqueous solutions by polyelectrolytes assisted ultrafiltration N. Ben Kraiem, D.J. Ennigrou, K. Zlaoui, K. Horchani-Naifer (Tunisia)	348
Adsorption studies of fluoride on weak base anion exchangers and surface modified strong acid cation exchangers in aqueous medium J.M. Karekar, R.T. Katamble, S.V. Divekar (India)	356
Cyanopropyl-functionalized nanosilica based dispersive micro-solid phase extraction method for rapid removal of organophosphorus pesticides from water samples Z.S. Korrani, A. Alizadeh (Iran), W.A. Wan Ibrahim (Iran, Malaysia), G. Sharma (India)	366

Effective glyphosate degradation through the combination of ozone/hydrogen peroxide oxidation and coagulation Lei Chen, Shengbao Zhou, Yanhua Xu, Yongjun Sun, Huaili Zheng (China)	377
Fabrication and characterization of low cost electro-spun carbon fibers from organosolv bagasse lignin: effect of modification conditions K.M. Abas, A.A.M. Attia, A.A.A. Nada, M.A.H. Shouman, M.S. Antonious (Egypt)	388
Solvothermally synthesized spherical copper hydroxyfluoride (CuOHF) as an efficient heterogeneous Fenton catalyst for degrading organic pollutants Zhiyang Yao, Tao Gu, Tianliang Lu, Yuzhong Zhan (China)	400
Performance study of activated carbon and silica gel for sorption of CO ₂ from a mixture of N ₂ /CO ₂ : equilibrium, breakthrough and mass transfer zone M.K. Al Mesfer, M. Danish, B.A. Al Alwan, N.S. Awwad (Saudi Arabia)	413
Kinetic and statistical analysis of Bisphenol A in wastewaters by ozonation and electrooxidation-ozonation processes N.P. Tanatti, E. Balkaya, İ.A. Şengil (Turkey)	429
Engineering superhydrophobic-superoleophilic nylon mesh for high-efficiency oil-water separation Hong Shi, Tiantian Wang, Long Zhao, Weihua Zhu (China)	438
Author Index	449