



Contents

Volume 165

Improving the solar still performance by using thermal energy storage materials: A review of recent developments S.W. Sharshir (China, Egypt), A.H. Elsheikh (Egypt), E.M.A. Edreis (Sudan, Egypt), M.K.A. Ali (Egypt), R. Sathyamurthy (India, Egypt), A.E. Kabeel (Egypt), Jianfeng Zang, Nuo Yang (China)	1
Simulation of a small solar storage tank and its operation strategy Chen-Yi Tsai, Rome-Ming Wu (Taiwan)	16
An experimental work on the performance of solar still incorporating with wind turbine and thermal energy storage unit A.R.A. Elbar, H. Hassan (Egypt)	24
Feasibility study of grid-connected photovoltaic system for seawater desalination station in Algeria F. Fodhil, M. Bessenasse, I. Cherrar (Algeria)	35
Influence of nitrogenous compound concentration in simulated coal processing wastewater on nitrogenous pollutant removal in moving bed biofilm reactors under different dissolved oxygen concentrations Jingping Chai, Yingdong Wang (China)	45
Incorporation of magnetite nanoparticles in poly(vinyl chloride) microfiltration membrane for improving antifouling property and desalination performance M.M. Alghamdi, A.A. El-Zahhar, B.M. Asiri (Saudi Arabia)	54
Freestanding PTFE electrospun tubular membrane for reverse osmosis brine concentration by vacuum membrane distillation Tao Zhou, Jinde Li, Xiaoming Guo, Yongyi Yao, Puxin Zhu, Ruili Xiang (China)	63
Microbial community structure of aerobic granular sludge in automobile coating wastewater as revealed by Illumina sequencing Anlan Zhou, Dandan Yang, Shaogen Liu, Kuizu Su (China)	73
A novel approach to remove ofloxacin antibiotic from industrial effluent using magnetic carbon nanocomposite prepared from sawdust of <i>Dalbergia sissoo</i> by batch and membrane hybrid technology M. Wahab, M. Zahoor, S.M. Salman (Pakistan)	83
Effect of natural zeolite capping on phosphorus release from sediments Pan Qin, Shaoyong Lu, Xiaochun Guo, Xiaohui Liu, Bin Bi, Wei Xue, Deyi Wu (China)	97
Degradation of pesticide-contaminated wastewater (coragen) using electrocoagulation process with iron electrodes T. Ramya, P. Premkumar, A. Thanarasu, K. Velayutham, A. Dhanasekaran, S. Sivanesan (India)	103
Adsorptive removal of sodium dodecyl sulfate using activated coconut shell based adsorbent: kinetic and thermodynamic study P.S. Bhandari, P.R. Gogate (India)	111
High nitrate removal by ZnO/AgI nanophotocatalyst using graphene-based compounds M. Malmir, A. Mosayebi, M. Sheikhpour (Iran)	124
Enhanced Cr bioleaching efficiency from tannery sludge with <i>Acidithiobacillus ferrooxidans</i> and <i>Acidithiobacillus thiooxidans</i> Wenhao Wang, Jianlei Gao, Yonghong Li, Jingqing Gao (China)	134
Monitoring and health risk assessment of fluoride in drinking water in Babol, Mazandaran Province, Iran G. Asgari, S. Ghalehaskar, V. Kazemi Moghaddam, M. Radfard, Z. Heidarinejad, A.A. Mohammadi, H. Faraji (Iran)	141
Dual functional Fe/AC for treating phenol solutions by adsorption coupled with dry catalytic oxidation technology Bingzheng Li, Huiyuan Wu, Chan Zhang, Wei Zheng, Dekui Sun, Shiwen Lei (China)	148

A novel water hyacinth based biosorbent for 2,4-dichlorophenoxyacetic acid (2,4-D) removal from aqueous solution	
M.T. Aswani, M.V. Pavan Kumar (India)	163
Hydrochemical processes and groundwater quality assessment in Yushenfu mining area, Northwest China	
Ji Liu, Min Gao, Tiantian Wang, Jian Yang, Qiangmin Wang (China)	177
Biosorption of arsenic ions from the aqueous solutions using <i>Chlorella vulgaris</i> microalgae	
N. Ghayedi, J. Mohajeri Borazjani, D. Jafari (Iran)	188
Detection of chromium (III) in drinking water with modified gold nanoparticle	
C. Karami, E. Arkan, M.S. Arabi (Iran)	197
Removal of hexavalent chromium from aqueous solutions using almond green hull adsorbent magnetized by Fe ₃ O ₄ : isotherm, kinetic and thermodynamic studies	
M. Kamranifar, M.H. Moslehi, N. Nasseh (Iran), M. Ghadirian (Canada), S.M. Rahimi (Iran)	203
Removal of Cr(VI) from acid mine drainage with clay-biochar composite	
Hai Wang, Liya Tan, Baowei Hu, Muqing Qiu, Liping Liang, Linfa Bao, Yuling Zhu, Guohe Chen, Chengcai Huang (China)	212
Removal of organic dye and toxic hexavalent chromium ions by natural clay adsorption	
Y. Shiferaw, J.M. Yassin, A. Tedla (Ethiopia)	222
Production of KOH-activated carbon from date press cake: effect of the activating agent on its properties and Pb(II) adsorption potential	
Z. Heidarinejad, O. Rahmanian, M. Heidari (Iran)	232
Enhancement of biosorption capacity of cyanobacterial strain to remediate heavy metals	
G. Pant, A. Singh, M. Panchpuri, R.G. Prasuna (India), K. Hossain, S.Z. Abbas, A. Ahmad, N. Ismail, M. Rafatullah (Malaysia)	244
A green approach for iron removal and subsequent phosphate removal in Al Kharga (Egypt) using date palm biochar and its reusability: Case study	
D.Z. Husein (Egypt)	253
Removal of europium (III) from water by emulsion liquid membrane using Cyanex 302 as a carrier	
S. Laguel, M.H. Samar (Algeria)	269
Adsorption of Fe ions by modified carrageenan beads with tricarboxy cellulose: kinetics study and four isotherm models	
K.H. Kamal, S. Dacrory, S.S.M. Ali, K.A. Ali, S. Kamel (Egypt)	281
Effect of synthesis parameters on the formation 4A zeolite crystals: characterization analysis and heavy metals uptake performance study for water treatment	
S.M. Al-Jubouri, H.A. Sabbar, H.A. Laft, B.I. Waisi (Iraq)	290
Kinetics modeling and experimental validation of Reactive Blue 5G dye removal from synthetic solution by electrocoagulation	
C.L. Manfredi Gasparovic, E. Eyng, L. Mantovani Frare, F. Orssatto, L. de Bortoli Chiamolera Sabbi, I.J. Baraldi (Brazil)	301
Azo dye wastewater treatment in a bioelectrochemical-aerobic integrated system: effect of initial azo dye concentration and aerobic sludge concentration	
Min-Hua Cui, Jian Gao, Ai-Jie Wang (China), T. Sangeetha (Taiwan)	314
Photocatalyzed degradation of acid orange 7 dye under sunlight and ultraviolet irradiation using Ni-doped ZnO nanoparticles	
M. Pirsaeheb, K. Karimi, B. Shahmoradi, M. Moradi, Y. Vasseghian (Iran), E. Niculina Dragoi (Romania)	321
Efficiency of dye adsorption by biochars produced from residues of two rice varieties, Japanese Koshihikari and Vietnamese IR50404	
D.T.M. Phuong, N.X. Loc (Vietnam), T. Miyanishi (Japan)	333
Electrochemical removal of acid red 18 dye from synthetic wastewater using a three-dimensional electrochemical reactor	
Z. Yousefi, A. Zafarzadeh, R.A. Mohammadpour, E. Zarei, N. Mengelizadeh, A. Ghezel (Iran)	352
Application of kinetics and mathematical modelling for the study of colour removal from aqueous solution using natural organic polymer	
I.A. Obiora-Okafo, O.D. Onukwuli, C.N. Ezugwu (Nigeria)	362
Synthesized nano titanium for Methylene Blue removal under various operational conditions	
M. Samy, M. Mossad, H.Kh. El-Etriby (Egypt)	374

An overview on ultraviolet persulfate based advances oxidation process for removal of antibiotics from aqueous solutions: a systematic review M. Pirsaeheb, H. Hossaini, H. Janjani (Iran)	382
Author Index	396