



Contents

Volume 206

Removal of bacteria and pollutants from low susceptible to bio-decomposition septic tank effluent by non-woven filters
M. Spychała, J. Starzyk, A. Wolna-Maruwka (Poland), H.T. Nguyen (Vietnam) 1

Influence of human activities on water quality in two rural catchments – understanding the drivers and relationships for effective restoration
W. Kanownik, A. Policht-Latawiec, J. Dąbrowska (Poland) 10

Characteristics of organic pollutants in wastewater from individual treatment systems
M. Makowska, A. Sowinska (Poland) 22

Assessment of the drinking water quality of a rural distribution network in the north of Iran by corrosion and scaling indices
Z. Mokhtari, S. Yousefzadeh, M. Safari, M. Binesh Brahmand, H. Soleimani, K. Yaghmaeian (Iran) 27

Effects of water transfer on improving water quality in Huancheng River, Chaohu City, China
Feng Deng, Zhongkai Liu, Lu Zhang, Xiaopeng Hu, Qiwen Guan (China) 34

Multi-objective optimization of electrocoagulation–flotation (ECF) process for treatment of real dairy wastewater
M. Majlessi-Nasr, M. Rafiee, F. Amereh, M. Jahangiri-Rad, H. Jalilvand (Iran) 44

Electrocoagulation using zinc electrodes for dairy industry wastewater treatment
G.F. Silva Valente, R.C.S. Mendonça, L.B. Félix (Brazil) 58

Combining a flow-through bioassay system using *Daphnia magna* with a physicochemical analysis to evaluate the effluent toxicity of the aquaculture farm on the river
M. Rasti, Y. Hashempour, M. Ahmadi-Moghadam (Iran), V. Diacomanolis (Australia), R. Khoshnood, S. Jorfi, N. Shah-Heydar, S. Hasanian, N. Jaafarzadeh (Iran) 66

Factors affecting the efficiency of rye husk as a potential biosorbent for the removal of metallic pollutants from aqueous solutions
D.N. Iqbal, H. Yousaf, N. Masood, M. Iqbal, A. Nazir (Pakistan) 74

A review of the textile wastewater treatment technologies with special focus on advanced oxidation processes (AOPs), membrane separation and integrated AOP-membrane processes
N.R. Mirza, Ray Huang (Australia), Erdeng Du, Mingguo Peng, Zhigang Pan, Hui Ding, Guocheng Shan, Ling Ling (China), Zongli Xie (Australia) 83

Comparison of advanced oxidation methods of Fenton, UV/Fenton and O₃/Fenton in treatment of municipal wastewater
T. Khodadadi, E. Solgi, S. Mortazavi, H. Nourmoradi (Iran) 108

Experimental and numerical study of solar still with varying glass cover slopes
A.Z. Al-Garni, M. Aves, A.Z. Sahin (Saudi Arabia) 116

High productivity thermoelectric based distiller
M.T. Nasir, D. Afaneh, S. Abdallah (Jordan) 125

Thermodynamics of sub-atmospheric vapor pipeline (SAVP) for seawater desalination: a study for vapor-liquid equilibrium and the fluid properties associated with a field application
M. Shojaei, M. Nosrati, R. Attarnejad, B. Saghafian (Iran) 133

Digestion of linoleic acid using an anaerobic fluidized bed reactor
J. Lawrence, R.B. Mahar (Pakistan), J.L. Ullman (Pakistan, USA), Z. Ahmed (Pakistan) 144

Composting as a disposal route of PLA materials: kinetics of the aerobic biodegradation
D. Kulikowska, K. Bernat, I. Wojnowska-Baryła, S. Pasiieczna-Patkowska, R. Jabłoński (Poland) 153

A glance on thermo-responsive ionic liquids as draw solution in forward osmosis system
M.A.M. Abdullah, M.S. Man, S.B. Abdullah, S.M. Saufi (Malaysia) 165

Studies on properties and adsorption ability of bilayer chitosan/PVA/PVDF electrospun nanofibrous N.A.B. Mohd Salleh, A.M. Afifi, F.B. Mohamed Zuki, N.B. Muhammad Sarih (Malaysia), K. Kalantari (USA), E. Niza Mohamad (Malaysia)	177
Pretreatment process optimization and reverse osmosis performances of a brackish surface water demineralization plant, Morocco H. Boulahfa, S. Belhamidi, F. Elhannouni, M. Taky, M. Hafsi, A. Elmidaoui (Morocco)	189
Mesoporous biochar obtained from coir pith on removing nickel (II) from aqueous simulated solution – batch and column studies L. Vidhya, T. Ramya, S. Vinodha (India)	202
Comparative studies to remove cobalt ions from hazardous waste solutions by immobilized microbial species using several techniques: beads and thin film M.T. Shaaban, A.S. Abdel-Razek, S.A. Mahmoud, E.M. Kandeel (Egypt)	215
Chelating surfactant for the removal of heavy metals from wastewater and surfactant recovery Zhongli Peng, Hongyan Chen, Yuanhua Li, Kejun Feng, Chunhua Wang, Fangli Liao, Hong Deng, Yiting Huang (China)	229
Enhanced adsorption of chromium (VI) from aqueous medium by basic nanohydroxyapatite/chitosan composite based on egg shell A.F. Hassan, G.A. El-Naggar, A.G. Braish, M.F. Amira (Egypt), L.M. Alshandoudi (Oman)	235
Biosorption of Pb ²⁺ and Cr ³⁺ ions from aqueous solution by two brown marine macroalgae: an equilibrium and kinetic study H.S. Ali, N.F.E.S. Kandil, I.B.M. Ibraheem (Egypt)	250
Novel graphene oxide based adsorbents for removing water pollutants Pb ²⁺ , Cd ²⁺ , Mn ²⁺ and Mg ²⁺ ions Yan Zhang, Feng Liang, Pingge Dian, Zhan Chen (China)	263
Selective chelation adsorption of copper ion on KH550 modified acid-activated attapulgite Weiying Wang, Hongzhe Chen, Lin Wang, Shaogui Yang, Yong Wang (China)	273
Removal of lead ions from aqueous solutions by insolubilized Iraqi humic acid H.M. Baker, F.I. Khalili, B.I.A. Aldulaimy (Jordan)	286
Effective adsorption Ag(I) onto triethylenetetramine-modified chitosan beads: adsorption equilibrium, kinetic, and thermodynamic studies Guoquan Sun, Xiaohuan Tang, Limin Zhou, Zhirong Liu, Zhanggao Le, Guolin Huang (China)	297
Diagnosis of leachate from a closed landfill, impact on the soil and treatment by coagulation flocculation with alginate and ferric chloride M. Kastali, L. Mouhir, M. Assou, A. Anouzla, Y. Abrouki (Morocco)	307
Synthesis, characterization, and tetracycline adsorption behaviour of activated carbon doped alginate beads: isotherms, kinetics, thermodynamic, and adsorption mechanism F. Korkut, D. Saloglu (Turkey)	315
Adsorption characteristics of diclofenac sodium onto graphene nanoplatelets A. Zaka, T.H. Ibrahim, M.I. Khamis, F. Samara (UAE)	331
Occurrence and fate of ten sulfonamide antibiotics in typical wastewater treatment plants in the City of Jinan of Northeastern China Bin Zhao, Ying Liu, Wenping Dong, Ming Li, Shaoyong Lu, Weiliang Wang, Yuqi Fan (China)	340
Degradation of ofloxacin in water by combination of simulated solar light and persulfate Yangmei Li, Bo Liu, Shengtao Xing (China)	349
Modified ginkgo leaves for adsorption of methyl violet and malachite green dyes in their aqueous system Lincai Peng, Jing Gao, Shun Yao, Xianqiu Lan, Huaiping Li, Hang Song (China)	358
A <i>Moringa oleifera</i> seeds-based filter for efficient removal of Congo red from aqueous medium A.K. Virk, P. Thakur, I. Sharma, Swati, C. Kumari, A. Chauhan (India), Xiangkai Li, E.-S. Salama (China), S. Kulshrestha (India)	371
Solar photocatalytic degradation of Reactive Black 5: by-products, bio-toxicity, and kinetic study H. Nassehinia, H. Rahmani, K. Rahmani, A. Rahmani (Iran)	385
Performance of a local clay deposit in adsorptive and photochemical removal of Acridine Orange dye and DNA indicator from wastewater S. Khelifi, B. Mallah, M. Trabelsi Ayadi, M.H. Oueslati (Tunisia), H.M. Sbihi (Saudi Arabia), F. Ayari (Tunisia)	396

Preparation of Mg(OH) ₂ nanoparticles modified PVDF membranes for efficient dye adsorption and rejection Ying Cai, Jian Lu, Jun Wu (China)	407
PSO-based integration navigation and LiDAR-based remote sensing algorithms for 3D agriculture digital modeling with light multi-rotor UAV Guangqi Wang, Yu Han, Jian Chen, Hao Meng, Shubo Wang, Zichao Zhang (China)	416
Identification and use of local iron-ores deposit as adsorbent: adsorption study and photochemical regeneration S. Khelifi (Tunisia), A. Choukchou-Braham (Algeria), M.H. Oueslati (Tunisia), H.M. Sbihi (Saudi Arabia), F. Ayari (Tunisia)	429
Enhanced solar-light-driven photocatalysis by carbon-nanodots/nanodiamonds heterojunction Xiaochen Sun, Chen Wang, Lu Liu, Qiliang Wang, Shaoheng Cheng, Nan Gao, Junsong Liu, Hongdong Li (China)	439
Author Index	447