

Contents

Volume 185

The application of nanomaterial adsorbents for the removal of impurities from water and wastewaters:
a review

M. Bodzek, K. Konieczny, A. Kwiecińska-Mydlak (Poland) 1

Studies on textile effluent for desalination using electrodialysis and its membrane fouling analysis

Chao Li, Miaoqiao Luo, Jiashun Cao, Hanyue He, Ming Xu (China) 27

Extraction method and structural and composition characteristics of extracellular polymeric substances
in granular sludge from an enhanced biological phosphorus removal system

Yajing Li, Shaopo Wang, Zhu Li, Liping Sun (China) 41

Sustainability metrics on microalgae-based wastewater treatment system

Aline Meireles dos Santos, M.C. Deprá, Alberto Meireles dos Santos, A.J. Cichoski,
L.Q. Zepka, E. Jacob-Lopes (Brazil) 51

Bioaugmentation for improving acidification recovery of an anaerobic sequencing batch reactor
after organic shock load

Xiangwen Shao, Tingting Zhang, Yao Chen, Cuiling Ai (China) 62

Reducing endotoxin from dialysis water by using different disinfection processes

Y.R. Humudat, S.K. Al-Naseri, Y.F. Al-Fatlawy (Iraq) 71

Experimental research and industrial application on bypass flue gas evaporation technology
for FGD wastewater

Shuangchen Ma, Jin Chai, Xuan Bie, Kai Wu, Baozhong Qu, Wan Zhongcheng,
Zhang Jingrui, Liu Ning, Yue Peiheng (China) 77

Olive mill wastewater spreading improves growth, physiological and biochemical traits of *Phaseolus vulgaris*

H. Boutaj, A. Boutasknit, W. Elhaissoufi, M. Anli, M. Ait-El-Mokhtar, R. Ben-Laouane,
Y. Ait-Rahou, S. Wahbi, C. El Modafar, A. Meddich (Morocco) 87

Reduction of excess sludge production by microwave/activated carbon fibre pretreatment process
based on lysis-cryptic growth

Dedong Sun, Ke Zhang, Yina Wang, Hongchao Ma, Chun Ma (China) 99

Should variable declining rate filters be operated as one large or several separate plants?

W. Dąbrowski (Poland) 105

Study on horizontal jets with buoyancy in shallow waters

Jie Song (China), Mingtao Jiang, Myung Eun Lee, A. Wing-Keung Law (Singapore) 111

Effect of the wall thickness of an overflow pipe on the short-circuit flow

Yung-Sheng Lai, Rome-Ming Wu (Taiwan) 124

Effect of *Grewia* spp. biopolymer on floc properties of coagulated laterite suspension

K.N.M. Bernard (India, Cameroon), P.V. Bobde (India), N.K. Sylvère, K.G. Patrice,
K.G. Joseph (Cameroon), S. Pal (India) 132

Removal of ammonia and COD from leachate by MAP precipitation method
and contribution of natural materials

A. Kuleyin, Ö. Yeni, Y. Sışman (Turkey) 145

Degradation of mefenamic acid using magnetic multi-walled carbon nanotube

as a novel particle electrode in a three-dimensional electro-Fenton process
M. Reza Zare, N. Mengelizadeh, H. Pourzamani, Y. Hajizadeh, H. Mohammadi,
M. Khodadadi Saloot (Iran) 152

A bio-inspired algorithm for a classical water resources allocation problem
based on Adleman-Lipton model

Anjun Deng, Zhaocai Wang, Haifeng Liu, Tunhua Wu (China) 168

The adsorption kinetic parameters of Cu²⁺ and Cr³⁺ ions by α-C₂SH

D. Niuniavaite, K. Baltakys, T. Dambrauskas (Lithuania) 175

Investigating the effect of photo-electro oxidation process modified with activated carbon bed as a porous electrode on amoxicillin removal from aqueous solutions R.A. Fallahzadeh, M.H. Ehrampoush, M. Nabi Meybodi, M.T. Ghaneian, A. Dalvand, F. Omidi, M.H. Salmani, H. Fallahzadeh, A.H. Mahvi (Iran)	185
Sorption studies for the removal of arsenite onto <i>Pinus roxburghii</i> cone: pH, isothermal, kinetics and thermodynamic studies N. Rauf, Guangliang Liu, Yong Cai (USA), S.S. Tahir (Pakistan)	196
Arsenic adsorption from groundwater using non-toxic waste as adsorbent D. Dhakal, S. Babel (Thailand)	209
Biosorption of heavy metal ions on peel of <i>Artocarpus nobilis</i> fruit. 2. Improvement of biosorption capacities of Ni(II) through different modifications P.A. Kotabewatta, N. Priyantha (Sri Lanka), L.B.L. Lim (Brunei)	226
Use of eggshell powder as low-cost adsorbent for effective Cr(VI) and Co(II) ion removal F. Granados-Correa, E. Gutiérrez-Bonilla (Mexico)	237
Hydrothermal synthesis of CaTiO ₃ cuboid-like nanoparticles starting from metatitanic acid and calcium hydroxide and their adsorption performance for Cd(II), Pb(II), Ni(II) and Co(II) cations Qin Zhou, Aili Wang, Hengbo Yin (China)	247
Modeling and optimization of removal of strontium and cesium from aqueous streams by size enhanced ultrafiltration using chitosan derivative E. Kavitha, M. Dalmia, A.M. Samuel, S. Prabhakar, M.P. Rajesh (India)	262
Removal of citric acid from water by tributyl amine in octyl acetate: equilibrium and optimization by central composite design T. Evlik, Y.S. Aşçı, N. Baylan, S. Çehreli (Turkey)	277
Hydrothermal synthesized zinc oxide/kaolinite for photo-decolorization of methyl violet I. Fatimah, R. Nurillahi, F. Harjanti (Indonesia)	286
Fabrication of built in microfluidic systems for efficient electrochemical decolorization of reactive dyes Z. Mohammad Redha, H.A. Yusuf, A.H. AlGhatam (Bahrain)	296
Converting <i>Hylocereus undatus</i> (white dragon fruit) peel waste into a useful potential adsorbent for the removal of toxic Congo red dye L.B.L. Lim (Brunei), N. Priyantha (Sri Lanka), S.A.A. Latip, YieChen Lu, A.H. Mahadi (Brunei)	307
Process optimization, isotherm, kinetics, and thermodynamics studies for removal of Remazol Brilliant Blue-R dye from contaminated water using adsorption on guava leaf powder C. Debamita, N. Rampal, J.P. Gautham, P. Vairavel (India)	318
Non-thermal atmospheric pressure plasma jet-assisted degradation of azo dye-acid orange 7 (AO7): influence of operating parameters and toxicity evaluation K.N. Pandiyaraj, D. Vasu, P.V.A. Padmanabhan, R.R. Deshmukh, V. Kandavelu, D. Saravanan (India), P.S. Esbah Tabaei, P. Cools, N. De Geyter, R. Morent (Belgium)	344
Removal of methylene blue by NaX zeolites synthesized from coal gasification fly ash using an alkali fusion-hydrothermal method Yun-Peng Zhao, Dong-Xue Guo, Shi-Feng Li, Jing-Pei Cao, Xian-Yong Wei (China)	355
Use of <i>Polyalthia longifolia</i> based alumina composites for the removal of reactive dyes from aqueous medium K. Ikram, N. Jamil, M. Salman, M. Shehrbano, A. Siddique (Pakistan)	364
Efficient treatment of textile dyeing effluent by electrocoagulation process using aluminium electrode S. Sen, D. Pal, A.K. Prajapati (India)	375
Hydrochemical evolution and quality assessments of streams water in Alaknanda basin, Garhwal Himalaya, India M. Mulhim, S. Ahmad (India)	384
Author Index	395