



Dominant factors controlling the efficiency of two-phase flow cleaning in spiral-wound membrane elements
Y. Wibisono (Enschede, Leeuwarden, The Netherlands and Malang, Indonesia), F. Ahmad (Enschede),
E.R. Cornelissen (Nieuwegein), A.J.B. Kemperman and K. Nijmeijer (Enschede, The Netherlands)..... 17625

Effect of hydrophilic Cu₃(BTC)₂ additives on the performance of PVDF membranes
for water flux improvement
Ki Yong Jee, Jae Sung Kim, Jinsoo Kim and Yong Taek Lee (Yongin, Korea) 17637

Preparation of ECTFE membranes with bicontinuous structure via TIPS method by a binary diluent
Bo Zhou, Qian Li, Yuanhui Tang, Yakai Lin and Xiaolin Wang (Beijing, China) 17646

Modification of polysulfone ultrafiltration membrane by sequential deposition of cross-linked
poly(vinyl alcohol) (PVA) and sodium carboxymethyl cellulose (CMCNa) for nanofiltration
Yuhao Zhang, Chuang Yu, Zhenhua Lü and Sanchuan Yu (Hangzhou, China) 17658

Characterization, fouling, and performance of synthesized chitosan–glycerol membranes
in bacterial removal from municipal wastewater
E.I. Cadogan, Ching-Hwa Lee (Changhua, Taiwan), S.R. Popuri (Cave Hill Campus, Barbados)
and Hang-Yi Lin (Changhua, Taiwan)..... 17670

Fouling control strategy for submerged membrane bioreactor filtration processes using aeration airflow,
backwash, and relaxation: a review
Z. Yusuf, N. Abdul Wahab and S. Sahlan (Johor, Malaysia) 17683

Quorum quenching MBR operations for biofouling control under different operation conditions
and using different immobilization media
B. Köse-Mutlu, T. Ergön-Can, İ. Koyuncu (Istanbul, Turkey) and Chung-Hak Lee (Seoul, Korea)..... 17696

Thermoeconomic investigation of coupling MED-TVC with a combined cycle power plant
K. Maghsoudi, M. Aliasghari and A. Mehrpanahi (Tehran, Iran) 17707

Glass cover inclination angle effect on the radiation shape factor within conventional solar still
W.M. El-Maghlany (Alexandria), Y.A.F. El-Samadony and A.E. Kabeel (Tanta, Egypt) 17722

Carbon electrode modified by KOH solution to improve performance of capacitive desalination
Dong Wang, Cheng Li, Jia Guo and Ting Li (Jilin, China) 17731

Evaluation of kinetic and thermodynamic parameters in adsorption of lead (Pb²⁺) and chromium (Cr³⁺)
by chemically modified *macadamia* (*Macadamia integrifolia*)
N. Vilas Boas, J. Casarin, G.P. Gerola (Umuarama), C.R. Teixeira Tarley (Londrina),
J. Caetano (Toledo), A.C. Gonçalves Jr. (Marechal Cândido Rondon)
and D.C. Dragunski (Umuarama and Toledo, Brazil) 17738

Hexavalent chromium removal using agricultural waste "rye husk"
T. Altun, Ş. Parlayıcı and E. Pehlivan (Konya, Turkey) 17748

Removal of toxic hexavalent chromium from aqueous solution by nickel ferrite-polyaniline nanocomposite
S. Agrawal and N.B. Singh (Greater Noida, India) 17757

Removal of Cr(VI) from wastewater by FeOOH supported on Amberlite IR120 resin
Shijiao Wu, Fenglian Fu, Zihang Cheng and Bing Tang (Guangzhou, China)..... 17767

Alkyl chain structure-dependent separation of Cr(VI) from acidic solutions containing various metal ions
using liquid–liquid solvent extraction by butyl-based imidazolium bromide salts
V. Eyupoglu (Cankiri, Turkey)..... 17774

Biosorption of Pb²⁺, Ni²⁺ and Cu²⁺ ions from aqueous solutions by L-cystein-modified
montmorillonite-immobilized alginate nanocomposite
A. Mittal (Bhopal), R. Ahmad and I. Hasan (Aligarh, India) 17790

Application of *Terminalia arjuna* as potential adsorbent for the removal of Pb(II) from aqueous solution:
thermodynamics, kinetics and process design
R.A.K. Rao, A. Khatoun and A. Ashfaq (Aligarh, India) 17808

Kinetic, isotherm and thermodynamic studies for the removal of Pb ²⁺ ion by a novel adsorbent <i>Luffa acutangula</i> (LAPR) R. Ahmad and S. Haseeb (Aligarh, India)	17826
Using the dehydrogenase activity for alert of activated sludge system under different copper concentrations Qian Feng, Yubing Xiao (Nanjing), Xiaochen Li (Tai'an), Zhaoxia Xue, Fang Fang, Jiasun Cao, J.O. Oleyiblo (Nanjing, China) and Zhirong Hu (Hamilton, Canada).....	17836
Photocatalytic degradation of methylene blue and methyl orange in a Zn(II)-based metal–organic framework Chong-Chen Wang, Yan-Qiu Zhang, Tian Zhu, Peng Wang and Shi-Jie Gao (Beijing, China).....	17844
Separation of zinc ions from synthetically prepared brackish water using electro dialysis: effect of operating parameters A. Fadel (Setif, Algeria), R. Lafi, A. Aouni, A. Hafiane (Borj Cédria, Tunisia) and S. Nacef (Setif, Algeria)	17852
Influence of chitosan on modified nanoscale zero-valent iron for arsenate removal T. Yoadsomsuay (Bangkok), N. Grisdanurak (Pathumthani, Thailand) and C.-H. Liao (Tainan, Taiwan)	17861
Removal of cationic and oxyanionic heavy metals from water using hexadecyltrimethylammoniumbromide-modified zeolite Fu-Chuang Huang (Chung-Li), Yin-Lung Han (Hsinchu), Chung-Kung Lee and Huan-Ping Chao (Chung-Li, Taiwan)	17870
Production and characterization of activated carbon from <i>Leucaena</i> plant wastes for removal of some toxic metal ions from waste solutions E.A. Abdel-Galil, H.E. Rizk and A.Z. Mostafa (Cairo, Egypt)	17880
Metal ion sorption dynamics in a foamed chitosan structure P. Rdzanek and J. Marszałek (Łódź, Poland)	17892
Odor emission impact assessment of Zhengwangfen wastewater treatment plant in Beijing Chunhui Zhang, Liangliang Wang, Xiaochan Wang, Jing Lu, Xin Zhang, Wei An, Yanting Xiao, Lei Li, Hangyin Shen, Weidong Jing and Shan Jiang (Beijing, China).....	17901
Effects of different environmental and operating conditions on sulfate bioreduction in shake flasks by mixed bacterial culture predominantly <i>Pseudomonas aeruginosa</i> B. Brahmacharimayum and P.K. Ghosh (Guwahati, India)	17911
Effect of pre-oxidation by chlorine/permanganate on surface water characteristics and algal toxins A.A.M. Gad and S. El-Tawel (Assiut, Egypt).....	17922
SHARON process as preliminary treatment of refinery wastewater with high organic carbon-to-nitrogen ratio S. Milia, M. Perra, G. Cappai and A. Carucci (Cagliari, Italy).....	17935
Improving the properties of an anion exchanger based on sugarcane bagasse by applying pretreatment methods Yanpeng Mao, Miaomiao Zhang (Jinan, China), Dingyi Yu (Victoria, Australia), Wenlong Wang, Zhanlong Song, Xiqiang Zhao and Qinyan Yue (Jinan, China).....	17944
Synergetic degradation of benzotriazole by ultraviolet and ultrasound irradiation Chengqiang Wu, Li Xu, Kangling Bian, Xiao Chen and Feng He (Hangzhou, China)	17955
Adsorption behavior of phosphate on Mg–Al layered double hydroxide/montmorillonite composite Yongzai Wang and Gongshen Li (Zibo, China).....	17963
Efficiency of polyaluminum nitrate sulfate–polyamine hybrid coagulants for silica removal I. Latour, R. Miranda (Madrid, Spain), R. Carceller (Espoo, Finland) and A. Blanco (Madrid, Spain)	17973
Optimization of preparation conditions for activated carbon from <i>Prosopis africana</i> seed hulls using response surface methodology A. Abdul Rahim (Penang, Malaysia) and Z.N. Garba (Penang, Malaysia and Zaria, Nigeria)	17985
Textile dye wastewater treatment using freshwater algae in packed-bed reactor: modeling S. Devi, A. Murugappan and R. Rajesh Kannan (Chidambaram, India)	17995
Decolorization and degradation of Reactive Black 5 dye by photocatalysis: modeling, optimization and kinetic study A. Garg, V.K. Sangal and P.K. Bajpai (Patiala, India).....	18003

Anaerobic granular sludge-derived activated carbon: preparation, characterization and superior dye adsorption capacity Ge Zhang, Tao Yan, Dong Wei, Liangguo Yan, Xiaodong Wang, Qin Wei and Bin Du (Jinan, China)	18016
Fe ³⁺ /H ₂ O ₂ Fenton degradation of wastewater containing dye under UV irradiation Hang Xu, Tianlong Yu, Xiaoxi Guo (Luoyang) and Jianxu Wang (Xinyang, China)	18028
Removal of methylene blue, methyl violet, rhodamine B, alizarin red, and bromocresol green dyes from aqueous solutions on activated cotton stalks M. Özdemir (Isparta), Ö. Durmuş (Sanliurfa), Ö. Şahin and C. Saka (Siirt, Turkey)	18038
Application of melon seed shell as a natural low-cost adsorbent for the removal of Methylene Blue from dye-bearing wastewaters: optimization, isotherm, kinetic, and thermodynamic M. Rahimdokht, E. Pajootan and M. Arami (Tehran, Iran)	18049
Comparison of Fe/surfactant improved montmorillonite: adsorbing and in situ decomposing methylene blue and recycling use Xueping Liu, Xiaohui Jiang, Zhengjun Cheng, Limei Zhou, Yunwen Liao (Nanchong), Ming Duan and Qiang Pu (Chengdu, China).....	18062
Removal of crystal violet from aqueous solution using surfactant modified glass waste: kinetic, isotherm, and thermodynamic studies S. Sooki, R. Norouzbeigi and A. Rahbar-Kelishami (Tehran, Iran)	18076
Adsorption equilibrium, kinetics, and thermodynamics assessment of the removal of the reactive red 141 dye using sesame waste H. Sohrabi and E. Ameri (Shahreza, Iran)	18087
Author Index	18099