



Contents

Volume 289

Sensitive analysis on an integrated system of brackish water greenhouse desalination for freshwater production and crop growth
Luopeng Yang, Ren Jiang (China), V. Sergeev, E. Sokolova (Russia), Linhua Zhang, Feng Guo, Qiang Li (China), K. Sadeghi (Russia) 1

High-performance thin-film composite membrane consisting of a single layer of m-phenylenediamine/trimesoyl chloride fabricated via spin-assisted molecular layer-by-layer assembly
F. Fadhillah, A.M. Alghamdi (Saudi Arabia) 14

Restricted piperazine diffusion by polyacrylic acid for high flux nanofiltration membrane
Ziliang Fan, Fangwei Chen, Wentao Yan, Yong Zhou, Congjie Gao (China) 22

The conception of GIS to evaluate the impact of anthropogenic activities on the quality of surface waters of the dams of the hydrographic region of Constantinois-Seybouse-Mellegue, Algeria
S. Bahroun, K. Touioui, S. Gheid, N. Drouiche (Algeria) 35

Hardness removal of wastewater of power plant cooling tower using electrocoagulation system
D. Arabian, H. Pouretedal (Iran) 50

Circulating cooling water treatment of thermal power plant based on microbial treatment process
Ning Liu, Xingyu Liu, Liangshi Wang, Xuezhe Zhu, Qiyuan Gu (China) 62

Research on resourceful disposal of organosilicon wastewater containing magnesium
Jianguang Li, Jinong Xu, Yuechao Wu, Chonghe Li, Xiaohua Zheng, Kaifeng Zhou, Jinquan Chen, Yulin Wang, Luming Wang, Yifeng Lv, Zhongming Xu, Huiming Zeng, Feng Lin, Miaosen Yang, Liang Lv (China) 73

Chromium removal by newly developed microbial consortia supported on wood husk
M. Asri, R. Ouafi, W. Bahafid, S. Elabed, S.I. Koraichi (Morocco), F. Costa, T. Tavares (Portugal), N. El Ghachtouli (Morocco) 80

Natural coagulants derived from *Cassia fistula* and tamarind seed for the removal of copper ions
M.-T. Dao, D.-T. Vo, T.-N. Tran, L.-T.-T. Hoang, V.-C.-N. Nguyen (Vietnam) 92

Analysis of the effect of microscopic bubble collapse on the decomposition of Cr-EDTA heavy metal complexes
Yuanyuan Zhao, Guohui Li, Wei Xu, Rongsheng Zhu, Qiang Fu, Xiuli Wang (China) 98

3D-printed amidoximed hollow spheres with enhanced selectivity and antifouling property for uranium recovery from wastewater
Jinmei Li, Pin Gao, Nan Li, Zhining Wang (China) 111

Recent advancements in molecularly imprinted polymers for the removal of heavy metal ions and dyes
M.S. Khan, S.E.Z. Syeda, A.M. Skwierawska (Poland) 123

Single and simultaneous adsorption of inorganic and organic pollutants by NH₄Cl-induced activated carbon produced: isotherm and kinetic studies
A. Alahabadi, M.H. Saghi, A. Dehnabi, F. Riahimanesh (Iran) 145

Synthesis of N-doped TiO₂ nanoparticle and its application for disinfection of a treatment plant effluent from hospital wastewater
H. Kamani, S.D. Ashrafi (Iran), E.C. Lima (Brazil), A.H. Panahi, M. Garkani Nezhad, H. Abdipour (Iran) 155

Poly(methacrylic acid) surface modified magnetite nanoparticles for dispersive solid-phase adsorption of chlorpyrifos pesticide from aqueous solutions
M. Nozari, S. Shariati (Iran) 163

Promoted adsorption performance for sulfide over CuO loaded hydrotalcite
Xinyang Huang, Lifang Hu, Jichao Zhu, Jihong Xu, Jie He, Xiaoyang Chen (China) 180

The effects of advanced ultraviolet/H ₂ O ₂ treatment on oxidation of linear alkylbenzene sulfonate in detergent wastewater K. Ishida, H. Sakai (Japan)	191
Inhibition performance of benzotriazole-based composite inhibitor against carbon steel corrosion in stone processing wastewater Jingjing Xiang, Hao Peng, Likun Li, Heng Liu, Qiaoyun Zhu, Yanjun Huang, Yi Wang, Guozhi Fan, Lei Zhang (China)	197
Simultaneous removal of Methylene Blue and Direct Blue 71 with Pb(II) ions from multi-component systems: application of the multi-component Langmuir model G. Polat, E. Türkeş, Y. Sağ Açıkel (Turkey)	206
Photocatalytic decolorization of Methylene blue by using solid-state zinc exchanged clinoptilolite F. Jafarpisheh, M. Ghorbanpour (Iran)	221
Activated carbon nanofibers nonwoven flat sheet for methylene blue dye adsorption: batch and flow-through systems B.I. Waisi, M.H. Al-Furaiji (Iraq), J.R. McCutcheon (USA)	228
Evaluating the efficiency of scallop shell/iron oxide (II) nanocomposite in removal of direct red 81 dye from aqueous solutions: kinetic, isotherm and thermodynamic studies K. Dadras, S.D. Ashrafi, K. Taghavi, J. Jaafari (Iran)	238
Removal of textile dye Bemacid Red from water using <i>Casuarina equisetifolia</i> needles: kinetic and thermodynamic modeling S. Feddane, K. Oukebdane, M.A. Didi, A. Didi, A. Amara, O. Larabi (Algeria)	248
A <i>Ziziphus jujuba</i> waste-derived biochar as a low-cost adsorbent for the removal of Indigo carmine dye from aqueous solution S. Satouh, S. Bousba, N. Bougdah, C.E. Bounoukta, S. Halladja, N. Messikh (Algeria)	258
Author Index	271