



Contents
Volume 281

| | |
|---|-----|
| Unlocking the desalination processes future roadmap M.W. Shahzad (UK), Kim Choon Ng, Qian Chen (Saudi Arabia), Ben Bin Xu (UK) | 1 |
| Optimal management of multiple water resources by a heuristic optimization for a water supply in the desert cities of Western Iraq M. Eryiğit (Turkey), S.O. Sulaiman, A.B.A. Najm, N.M. Mhedi (Iraq) | 7 |
| Governing business in the seawater desalination sector through terotechnology A.A. Abuouf, K.M. Al Habib, M.H. Hamdi (Saudi Arabia) | 15 |
| Modified hemispherical solar distillers using contiguous extended cylindrical iron bars corrugated absorber A.E. Kabeel (Egypt), M.EH. Attia (Algeria), M.M. Abdel-Aziz, W.M. El-Maghlany (Egypt), A.S. Abdullah (Egypt, Saudi Arabia), M. Abdelgaied (Egypt), R. Sathyamurthy (Saudi Arabia), S.A. Ward (Egypt) | 26 |
| Comparative analysis of multi-effect distillation coupled with solar energy and combined cycle power plant M.S. Malik, A.T. Jafry, M. Asif (Pakistan) | 38 |
| Enhancement of anaerobic membrane bioreactor performance using microbe activator in palm oil mill effluent treatment Rou Hui Wong, Kai Jun Tan, Xin Xin Guo, Chin Heng Gan, M.J.K. Bashir (Malaysia), Ping Zheng (China), Choon Aun Ng (Malaysia) | 58 |
| Nature-based solutions enhanced by reactive materials for the protection of urban water bodies A. Bus, A. Karczmarczyk, A. Baryła (Poland) | 70 |
| DPSRE model framework for dynamic evaluation of the water environmental carrying capacity in a river network area of Taihu Lake, East China Yun Huang, Yanyan Fan, Yanhong Ren, Wei Wan, Jinqi Zhu, Zhen Zhou, Bofu Zheng (China) | 78 |
| The different units' performance and bed length effect of constructed wetland on the removal of organic substances, solids and nutrients from municipal wastewater: a case study, Iran R. Davoodi, K. Sharafi, H. Soleimani, A.H. Mahvi (Iran) | 91 |
| Analysis of reclaimed water irrigation research based on China National Knowledge Infrastructure Zhenjie Qiu, Mengying Sun (China) | 103 |
| Effect of different pore membrane on ultrafiltration treatment of wastewater contained heavy metals complexed by palygorskite Jun Ren, Zhongxing Li, Yilei Zhou, Lei Huang, Ben Ma, Jiakuan Pan, Ling Tao (China) | 112 |
| A feasibility study for recycling biodegradable adsorbent in the oil spill cleanup from seawater M.A. Mahmoud (Saudi Arabia) | 122 |
| Biosynthesis of monodispersed stable copper nanoparticles using <i>Syzygium cumini</i> : characterization and potential applications M.I. Din, R. Akbar, Z. Hussain, R. Khalid, M. Arshad, T. Hussain (Pakistan), S.A. Khan (Saudi Arabia) | 130 |
| Identification of β -lactam-resistant coding genes in the treatment plant by activated sludge process S. Moradi, R. Fouladi-Fard, R. Aali, M. Dolati, S. Shams, M. Asadi-Ghalhari, A. Hamta, M. Dehabadi (Iran) | 137 |
| Removal of chloramphenicol by direct current and pulse current electrocoagulation: implications for energy consumption and sludge reduction Wei Zeng, Huilin Li, Wenqing Zhang, Lujian Fan, Chunpeng Zhang (China) | 150 |
| Optimization of operating process was triggered by a saltation of ratio in a full-scale activated sludge system Yongfeng Hu, Yongxiang Zhang, Qi Chu, Fan Luo, Jinglun Cao (China) | 163 |

| | |
|---|-----|
| Hybrid hydroxyapatite/graphene composite materials synthesized from eggshell for adsorption of Cr(VI) in aqueous solution Rui Wu, Huizhong Wu, Yingxi Wang, Ling Li (China) | 176 |
| Taguchi design for optimization of the removal of chromium (VI) by impregnated bentonite (K ⁺) from aqueous solution A. Amara-Rekkab, M.A. Didi (Algeria) | 186 |
| Chemical adsorption of iron ions from drinking water using Jordanian zeolitic tuff N. Aljabarin (Jordan) | 196 |
| Optimization of chemical oxygen demand removal from petroleum refinery wastewater by electrocoagulation using tubular electrochemical reactor with a novel design G.F. Naser, T.J. Mohammed, A.H. Abbar (Iraq) | 204 |
| Fate of nitrogen in a tropical peat soil treated with clinoptilolite zeolite K. Krishnan (Malaysia), O.H. Ahmed (Brunei), L. Omar (Malaysia), M. Ali (Ghana), A.J.K. Chowdhury (Brunei), A.A. Musah (Malaysia) | 217 |
| Electrochemical process for removing nitrate from drinking water by Taguchi model G. Kashi, N. Nourieh (Iran) | 225 |
| Enhanced adsorption of ceftriaxone antibiotics from water by mesoporous copper oxide nanosphere A.M. Alsuhaibani, M.S. Refat, A.M.A. Adam (Saudi Arabia), M.G. El-Desouky, A.A. El-Bindary (Egypt) | 234 |
| Degradation efficiency of humic acid in presence of hydrogen peroxide and ultrasonic from aqueous media R. Morovati, M. Taghi Ghaneian, S. Rajabi, M. Dehghani (Iran) | 249 |
| Chicken bone ash is a cost-effective and efficient adsorbent for phenol removal from aqueous solution M.E. Fawzy, H.M. Ahmed, H.F. Nassar (Egypt) | 255 |
| Synthesis of a new multi-heterojunction photocatalyst BiOI/Bi ₂ O ₃ /MgO, and its photocatalytic efficiency in the degradation of rhodamine B under visible light B. Benalioua, I. Benyamina, M. Mansour, K. Mensri, A. Bentouami (Algeria), B. Boury (France) | 265 |
| Application of response surface methodology to optimize 4-nitrophenol adsorption by prepared molecular imprinting polymers Yiqi Liu, Gang Xue, Yaqian Ma, Lei Ding, Yanli Kong, Yang Gao, Zhonglin Chen (China) | 276 |
| Photocatalytic properties of bismuth oxyiodide nanomaterials with different morphologies Ji-wei Zhao, Zhi-qiang Wei, Shang-pan Huang, Ling Li, Jin-huan Ma (China) | 287 |
| Evaluation of TiO ₂ /smectite nanoparticles as an alternative low-cost adsorbent for chromium removal from industrial wastewater W. Aloulou, H. Aloulou, M. Romdhani (Tunisia), J. Duplay (France), R. Ben Amar (Tunisia) | 296 |
| Author Index | 305 |