



Contents
Volume 293

A novel dual-heated water and power cogeneration system using solar driven humidification–dehumidification cycle Weifeng He, Qile Shi, Zihui Zhang, Zhaohui Yao, Pengfei Su, Dong Han (China)	1
Study of solar still in groundwater treatment in Brazilian northeast K.S. da Silva, Y.J.V. de Brito, C.B. Silva, G.G.C. de Lima, K. Machado de Medeiros, C.A.P. de Lima (Brazil)	14
Future vision of using nuclear energy for desalination plants in Egypt M.K. Shaat, L.A. Shouman, D.A. Fadel (Egypt)	27
CFD simulation optimization of a swirling vortex cavitator and its oxytetracycline degradation characteristics: kinetics and degradation pathway Baoye Wang, Rihong Zhang, Yiyong Li, Xiaoming Lian (China)	34
Computational fluid dynamics calculations of high efficiency heat exchangers operating in laminar motion consisting of extruded plastic profiles with inserts M. Vismara, N. Mazzetti, R. Mereu (Italy)	43
LES simulations of a vacuum membrane distillation channel with geometric alterations J. Caspar, Guanyang Xue, A. Oztekin (USA)	49
Linear and nonlinear ensemble concepts for pan evaporation modeling J. Abdullahi (Nigeria), G. Elkiran, F. Aslanova, D. Orhon (Turkey)	67
Automatic scheduling and control technology of pump gate clusters of regional water conservancy project Aijun Sun, Donghui Hu, Chengju Shan, Jun Wang (China)	82
The "BOOT+BTO" operation mode of the comprehensive utilization of water conservancy project Zhiyong Li, Zhixiao Zhang, Zihan Chen, Yintao He, Fei Yang, Xiangtian Nie (China)	89
Derivation of formulas for sediment carrying capacity and erosion and deposition strength applicable to channel siltation calculation Xiaotian Dong, Zigui Jin, Wenjin Zhu, Feigang Liang (China)	100
Oxidative degradation technology of synthetic water pollutants containing sulfamethoxazole in urban suburbs based on section water quality response Zhiguo Zhang (China)	107
Optimizing of ultraviolet initiated template polymerization of cationic polyacrylamide by response surface methodology Zhengan Zhang, Juanfang Shang, Yuying Li, Lin Li, Yujiao Ye, Xia Hua (China), Bailian Li (USA)	114
Pretreatment of preserved fruits wastewater by a novel Fe(III)-catalyzed oxidation coupled with calcium oxide precipitation Chongzhi Yao, Pingzhong Feng, Zhongbin Xu, Zhongming Wang, Tingting Zhu, Zhibing Li, Shunni Zhu (China)	124
A review on the significance of Azolla for water and wastewater treatment S. Taghilou, M. Peyda, M. Mehrasbi (Iran)	138
Construction of specific nickel-based electrode using N, N-dimethylformamide/water as solvent and the application in metronidazole detection Yunfan Lu, Ruibin Wang, Guoping Wang, Nian Chen (China)	150
Citric acid-pyrolysis synthesis of bismuth titanate series compounds and their photocatalytic degradation Yu ying Mo, Biyang Tuo, Jianli Wang, Guanghua Nie, Yun Tang (China)	160
Photo-degradation and mineralization of ciprofloxacin by consecutive application UV/iodide process and biological treatment N. Mahmoudi, A. Jonidi Jafari, M. Farzadkia, M. Kermani, A. Sheikhmohammadi, H. Pasalari, A. Esrafilii (Iran)	170
Ultraviolet-catalyzed persulfate degradation of cellulosic ethanol wastewater Likun Huang, Yue Hou, Guangzhi Wang, Jingfu Han, Zhe Li, Yuanyuan Xu (China)	182

Phytoremediation potential of <i>Elodea canadensis</i> for reduction of chromium – optimization using response surface methodology V. Sankaranarayanan, S. Velusamy, P. Sankaran, K. Kandasamy (India)	192
The biosorption of Co(II) by <i>Homalothecium sericeum</i> from aqueous solutions under batch conditions: response surface methodology optimization and <i>Daphnia magna</i> bioassay M. Tanyol, V. Korkmaz, N. Yildirim, G.O. Erguven, N. Karaaslan Ayhan, M. Alatas (Turkey)	200
Removal of Cd(II) ion from aqueous solution using magnetic ionic liquid based nanocomposites [NiFe ₂ O ₄ @BMSI]Br: kinetics, isotherm and thermodynamic studies Mu. Naushad, M.R. Khan, T. Ahamad (Saudi Arabia)	208
Vegetable lignocellulosic wastes used as biosorbent for removal of Cu(II) from aqueous media A.M. Tanasa, A.C. Puitel, R.E. Tataru-Farmus, D. Suteu (Romania)	216
Biosorption of methylene blue dye using banana floret:: kinetic, equilibrium, thermodynamic and mass transfer studies C. Sutherland, B. Chittoo, V. Laltoo (Trinidad and Tobago)	224
Investigation of malachite green removal using graphene oxide-zinc oxide composite from aqueous solution: synthesis, characterization and application A.A. Alanazi (Saudi Arabia)	243
Statistical model for comparing the performance of four natural and chemical coagulants using polynomial model A.F.M. Alkarkhi, M.M.A. Ayash (Malaysia), S.S. Abu Amr (Oman), W.A.A. Alqaraghuli, M. Zulkifli (Malaysia)	253
Modification of the greened house rye grass macro- and micro nutrients uptake using magnetically treated water N. Al-Amri (Saudi Arabia), A. Tawfiq (Egypt), S. Boteva (Bulgaria), N. Yilmaz (Turkey), Lifu Zhang (China), M. Elhag (Oman)	267
Effect of a hydrophobically associating polymer on disproportionate permeability reduction to oil and water for sandstone reservoirs Xu Li, Xiaopeng Wang, Chunsheng Pu (China), N. Khan (Pakistan), Jingyang Pu, Shaofei Kang, Yun Bai, Kai Wang, Jing Liu (China)	276
Author Index	286