International Journal of Agricultural and Biological Engineering (IJABE)

Open Access at https://www.ijabe.org

Table of Contents

Volume 12, Number 3, May, 2019

Overview Articles (OA)
Overview of emerging technologies in sprinkler irrigation to optimize crop production
Applied Science, Engineering and Technology (ASET)
Influence of UAV flight speed on droplet deposition characteristics with the application of infrared thermal imaging
Power and Machinery Systems (PMS)
Vision-based adaptive variable rate spraying approach for unmanned aerial vehicles
Linhui Wang, Yubin Lan, Xuejun Yue, Kangjie Ling, Zhenzhao Cen, Ziyao Cheng, et al. (18
Design of bionic mole forelimb intelligent row cleaners
······································
Natural Resources and Environmental Systems (NRES)
Effects of degradable films with different degradation cycles on soil temperature, moisture and maize yield
Lixia Shen, Yumeng Zhang, Yinchao Lan, Ruofan Li (36
Water and nitrogen input optimization for jujube trees under surge root irrigation based on weighted grey correlation
model
Effects of regulated deficit irrigation on soil salinity, physiological processes and fruit quality of gray jujube under deser conditions
Zhipeng Liu, Chengli Zhu, Shuyu Wu, Weihua Guo, Yitikaer Abudushalamu, Xiyun Jiao, et al. (52 Effects of water and nitrogen coupling on growth, physiology and yield of rice
Yuanyuan Li, Xiaohou Shao, Daoxi Li, Menghua Xiao, Xiujun Hu, Jing He (60
Effects of water stress at different growth stages on comprehensive fruit quality and yield in different bunches or
tomatoes in greenhouses · · · · · Shuxue Hao, Hongxia Cao, Hubing Wang, Xiaoyan Pan (67
Measurement errors on sediment concentration from traditional runoff collection tanks and its correction possibility
Yuhan Huang, Hui Zhao, Fahu Li, Pujin Yuan, Wei Wang, Guanghui Zhang (77
Estimation of infiltration models parameters and their comparison to simulate the onsite soil infiltration characteristics
································· Hafiz Umar Farid, Zahid Mahmood-Khan, Ijaz Ahmad, Aamir Shakoor, Muhammad Naveed Anjum Muhammad Mazhar Iqbal, et al. (84
Information Technology, Sensors and Control Systems (ITSCS)
Intelligent automated system based on a fuzzy logic system for plant protection product control in orchards
P. Berk, A. Belšak, D. Stajnko, M. Lakota, N. Muškinja, M. Hočevar, J. Rakun (92
Classification method of cultivated land based on UAV visible light remote sensing

......Weicheng Xu, Yubin Lan, Yuanhong Li, Yangfan Luo, Zhenyu He (103)

Fish as a source of acoustic signal measurement in an aquaculture tank: Acoustic sensor based time frequency analysisShahbaz Gul Hassan, Shakeel Ahmad, Shafqat Iqbal, Ehsan Elahi, Murtaza Hasan, Daoliang Li, et al. (110)
Optimal control algorithm of fertigation system in greenhouse based on EC model
Yong Wu, Li Li, Shuaishuai Li, Hongkang Wang, Man Zhang, Hong Sun, et al. (118) Structural design and thermal performance simulation of shade roof of double-slope greenhouse for mushroom-vegetable
cultivation
Spectral difference analysis and identification of different maturity blueberry fruit based on hyperspectral imaging using
spectral index ···········Hao Ma, Kaixuan Zhao, Xin Jin, Jiangtao Ji, Zhaomei Qiu, Song Gao (134)
Biosystems, Biological and Ecological Engineering (BBEE)
A photosynthesis continuous monitoring system for CAM plants
Zhongliang Su, Guodong Wang, Liqiang Xu, Jinheng Zhang, Xueyan Liu (147)
Renewable Energy and Material Systems (REMS)
Prediction of methane production performances based on determination of organic components for different vegetable wastes ······Fanfan Cai, Hu Yan, Ruihong Zhang, Guangqing Liu, Chang Chen (154)
Impacts of fuel feeding methods on the thermal and emission performance of modern coal burning stoves
Riaz Ahmad, Yuguang Zhou, Nan Zhao, Crispin Pemberton-Pigott, Harold John Annegarn, Muhammad Sultan, et al. (160)
Optimization of fermentation factors to enhance rice straw degradation ability using a microbial consortium LZF-12
Guoxiang Zheng, Chenyang Zhou, Ting Yin, Zhaoxin Lu, Shuang Ai (168)
Guoxiang Zheng, Chenyang Zhou, Ting Yin, Zhaoxin Lu, Shuang Ai (168) Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products
Guoxiang Zheng, Chenyang Zhou, Ting Yin, Zhaoxin Lu, Shuang Ai (168) Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174)
Guoxiang Zheng, Chenyang Zhou, Ting Yin, Zhaoxin Lu, Shuang Ai (168) Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh
Guoxiang Zheng, Chenyang Zhou, Ting Yin, Zhaoxin Lu, Shuang Ai (168) Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174)
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180)
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium Ramat Borui Li, Jueyi Lin, Zhian Zheng, Hao Duan, Dong Li, Min Wu (187) Safety, Health and Ergonomics (SHE) Graphene oxide/multi-walled carbon nanotubes/gold nanoparticle hybridfunctionalized disposable screen-printed carbon electrode to determine Cd(II) and Pb(II) in soil
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium Ramat Borui Li, Jueyi Lin, Zhian Zheng, Hao Duan, Dong Li, Min Wu (187) Safety, Health and Ergonomics (SHE) Graphene oxide/multi-walled carbon nanotubes/gold nanoparticle hybridfunctionalized disposable screen-printed carbon
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium Ramat Borui Li, Jueyi Lin, Zhian Zheng, Hao Duan, Dong Li, Min Wu (187) Safety, Health and Ergonomics (SHE) Graphene oxide/multi-walled carbon nanotubes/gold nanoparticle hybridfunctionalized disposable screen-printed carbon electrode to determine Cd(II) and Pb(II) in soil Hui Wang, Yuan Yin, Guo Zhao, Fernando Bienvenido, Isabel M. Flores-Parrad, Zhiqiang Wang, et al. (194) Cover Caption
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium Ramat Borui Li, Jueyi Lin, Zhian Zheng, Hao Duan, Dong Li, Min Wu (187) Safety, Health and Ergonomics (SHE) Graphene oxide/multi-walled carbon nanotubes/gold nanoparticle hybridfunctionalized disposable screen-printed carbon electrode to determine Cd(II) and Pb(II) in soil Hui Wang, Yuan Yin, Guo Zhao, Fernando Bienvenido, Isabel M. Flores-Parrad, Zhiqiang Wang, et al. (194)
Agro-product and Food Processing Systems (AFPS) Developing a screw conveyor in radio frequency systems to improve heating uniformity in granular products Hongxue Zhou, Shaojin Wang (174) LW-NIR hyperspectral imaging for rapid prediction of TVC in chicken flesh Hui Wang, Hongju He, Hanjun Ma, Fusheng Chen, Zhuangli Kang, Mingming Zhu, et al. (180) Effects of different drying methods on drying kinetics and physicochemical properties of Chrysanthemum morifolium Ramat Borui Li, Jueyi Lin, Zhian Zheng, Hao Duan, Dong Li, Min Wu (187) Safety, Health and Ergonomics (SHE) Graphene oxide/multi-walled carbon nanotubes/gold nanoparticle hybridfunctionalized disposable screen-printed carbon electrode to determine Cd(II) and Pb(II) in soil Hui Wang, Yuan Yin, Guo Zhao, Fernando Bienvenido, Isabel M. Flores-Parrad, Zhiqiang Wang, et al. (194) Cover Caption Research Team of Mechanized Maize Production, China Agricultural University