

## 目 次

### 特 稿

- 湘南地区马尾松人工林间伐效果的分析研究/李志辉 ..... 1

### 生态学

- 区域尺度杉木生物量通用相对生长方程整合分析/刘雯雯,项文化,田大伦,等 ..... 7  
长沙市樟树林生态系统大气降水、植物、土壤间 N 含量的动态特征/张铸三,方 晰 ..... 15  
长沙市郊枫香人工林水文生态效应的研究/吕 磊,文仕知,胡孔飞,等 ..... 21  
森林生态系统文化功能价值计算方法与应用——以张家界森林公园为例/秦 彦,沈守云,  
吴福明 ..... 26

### 生物科学与技术

- 油桐油体蛋白基因的克隆及序列分析/龙洪旭,谭晓风,陈 洪,等 ..... 31  
中国梨醇-酰基转移酶基因的克隆及遗传多态性/乌云塔娜,康 秀,胡尚力,等 ..... 39  
不同提取方法对厚朴叶片总 DNA 提取效果的影响/于华会,杨志玲,杨 旭,等 ..... 45  
也门铁 ISSR-PCR 反应体系的优化及应用/刘和平,何业华,胡桂兵,等 ..... 50  
竹子 SRAP-PCR 体系的建立与优化/任立宁,郭起荣,何高峰,等 ..... 56

### 森林培育学

- 林分密度对小桐子生物量及其产量的影响/莫丽芬,唐建维,刀祥生,等 ..... 61  
基于定期调查数据的全林分年生长预测模型研究/张雄清,雷渊才 ..... 69  
基于复杂网络的野生动植物管理信息系统结构优化/张 贵,夏 栗,谭三清,等 ..... 75  
马尾松幼胚胚性愈伤组织诱导的研究/靳小翠,李志辉,杨模华,等 ..... 80  
不同产量类型油茶无性系光合特性的研究 IV—花期/王 瑞,陈永忠,王湘南,等 ..... 85  
神农架华山松群落特征研究/文仕知,宋良友,喻勋林 ..... 91  
景观树种红翅槭愈伤组织诱导培养/唐 丽,钟秋平,刘显梅,等 ..... 97

### 植物生理学

- 美国桂花种子低温层积过程中种子结构的变化/黄 丹,许岳香,胡海波 ..... 101

### 遥感技术

- RapidEye 卫星遥感影像几何精度的实验分析/祝振江,周英杰,周 萍,等 ..... 107  
估测森林蓄积量的遥感因子选择研究/黄伟平,谭三清,张 贵,等 ..... 112

[期刊基本参数] CN43-1470/S \* 1981 \* m \* A4 \* 172 \* zh \* P \* ¥20.00 \* 1200 \* 33 \* 2010-04 \* n

## 材料科学

- 杉木-纳米 CaCO<sub>3</sub>复合材料结构表征及其复合机理分析/袁光明,刘元,刘干 ..... 116  
再生混凝土基本性能的改善方法/覃银辉,刘付华,张学兵 ..... 122  
5-羟甲基噻唑的合成工艺/肖红波,殷作虎,辛莎,等 ..... 127

## 森林保护

- 油茶内生拮抗细菌 Y13 菌剂研制/游嘉,周国英,刘君昂,等 ..... 131  
基于灰色关联度分析的森林火灾危害程度及相关因子研究/谭三清,张贵,刘大鹏 ..... 135

## 机 械

- 基于 Pro/ENGINEER 坚果采摘臂的建模及运动仿真分析/蔡颂,李立君,高自成 ..... 139

## 土建工程

- 基于信息熵-未确知测度理论的膨胀土胀缩分级评价/史秀志,胡海燕,周健 ..... 144

## 环境科学与工程

- 生物柴油生产过程中废水的处理技术/石卉,吴晓芙,李科林,等 ..... 150  
土地复垦适宜性评价方法/王欢,王平,谢立祥,等 ..... 154  
突发性环境污染事件应急联动系统的构建与研究/李云,刘霖 ..... 159

## 数 学

- 关于 Cantor 测度的点态下密度的一个估计/王松然,文益君 ..... 163

## 网络工程

- 一种基于网格的分簇路由算法/占强,林亚平 ..... 166  
校园网络的多层次安全体系研究/肖阳,李阳 ..... 170

## 简 讯

- 简讯二则 ..... 20,30

## 学者风采

- 李志辉教授 ..... 封二

## 特色学科

- 中南林业科技大学森林培育学科种子标本室简介及新技术设备推介 ..... 封三

**CONTENTS**

Thinning effects of <i>Pinus massoniana</i> plantations in the southern region of Hunan province/LI Zhi-hui .....	1
General allometric equations for estimating <i>Cunninghamia lanceolata</i> tree biomass on large scale in southern China/LIU Wen-wen, XIANG Wen-hua, TIAN Da-lun, et al. ....	7
Dynamic characteristics of nitrogen content among precipitation, plant and soil in Chongsha Camphor forest ecosystem /ZHANG Zhu-san, FANG Xi .....	15
The hydro-ecological effects study of the <i>Liquidambar formosana</i> plantation in suburban area of Changsha /Lü Lei, WEN Shi-zhi, HU Kong-fei, et al. ....	21
Methods and application of forest ecosystem service cultural valuation: taking the forest park of Zhangjiajie as example /QIN Yan, SHEN Shou-yun, WU Fu-ming .....	26
Cloning and sequence analysis of full-length cDNAs encoding oleosins from <i>Vernicia fordii</i> /LONG Hong-xu, TAN Xiao-feng, CHEN Hong, et al. ....	31
Alcohol-acyltransferase (AAT) gene cloning and genetics polymorphism of six Chinese pear cultivars /WUYUN Ta-na, KANG Xiu, HU Shang-li et al. ....	39
Effect of different methods on endangered plant <i>Magnolia officinalis</i> DNA extraction from leaves /YU Hua-hui, YANG Zhi-ling, YANG Xu, et al. ....	45
Optimization and application of inter simple sequence repeat reaction system of <i>Dracaena fragrans</i> /LIU He-ping, HE Ye-hua, HU Gui-bing, et al. ....	50
Establishment and optimization of SRAP-PCR reaction for bamboos/REN Li-ning, GUO Qi-rong, HE Gao-feng, et al. ....	56
Influence of stand densities on the biomass and seed yield of <i>Jatropha curcas</i> plantations /MO Li-fen, TANG Jian-wei, DAO Xiang-sheng, et al. ....	61
Annual whole-stand growth prediction model based on periodic inventory data/ZHANG Xiong-qing, LEI Yuan-cai .....	69
Structural optimization of wildlife management information system based on complex networks /ZHANG Gui, XIA Li, TAN San-qing, et al. ....	75
Embryonic callus induction of immature embryo of <i>Pinus massoniana</i> /JIN Xiao-cui, LI Zhi-hui, YANG Mo-hua, et al. ....	80
Comparison on photosynthetic characteristic in different yield types of <i>Camellia oleifera</i> clones: blooming stage /WANG Rui, CHEN Yong-zhong, WANG Xiang-nan, et al. ....	85
Study on the community characteristics of <i>Pinus armandii</i> in Shennongjia national nature reserve /WEN Shi-zhi, SONG Liang-you, YU Xun-lin .....	91
Induction and culture of callus of landscape trees <i>Acer fabri</i> Hance /TANG Li, ZHONG Qiu-ping, LIU Xian-mei, et al. ....	97
The changes of seed structure in <i>Osmanthus americanus</i> seed during cold stratification /HUANG Dan, XU Yue-xiang, HU Hai-bo .....	101
Geometric accuracy experimental analysis of remote sensing image of RapidEye satellite /ZHU Zhen-jiang, ZHOU Ying-jie, ZHOU Ping, et al. ....	107
Selection of remote sensing factors for estimating forest volume /HUANG Wei-ping, TAN San-qing, ZHANG Gui, et al. ....	112
Structure characterization and compounding mechanism of Chinese fir/Nano-CaCO <sub>3</sub> composite /YUAN Guang-ming, LIU Yuan, LIU Gan .....	116
Method for improving the basic performance of recycled concrete /QIN Yin-hui, LIU Fu-hua, ZHANG Xue-bing .....	122
Synthetic process of 5-Hydroxymethylthiazole /XIAO Hong-bo, YIN Zuo-hu, XIN Sha, et al. ....	127
Microbial inoculum of <i>Camellia oleifera</i> endophytic antagonistic bacteria Y13 /YOU Jia, ZHOU Guo-ying, LIU Jun-ang, et al. ....	131
Study on the grey correlation analysis between the harm's degree of forest fires and it's related factors /TAN San-qing, ZHANG Gui, LIU Da-peng .....	135
Study on design and simulation of fruit picking arm based on Pro/ENGINEER /CAI Song, LI Li-jun, GAO Zi-cheng .....	139
The classification of the grade of shrink and expansion for the expansive soils based on information entropy and uncertainty measurement theory /SHI Xiu-zhi, HU Hai-yan, ZHOU Jian .....	144
An outlook on wastewater treatment technology in bio-diesel production /SHI Hui, WU Xiao-fu, LI Ke-lin, et al. ....	150
Commentary on methods for suitability evaluation of land reclamation /WANG Huan, WANG Ping, XIE Li-xiang, et al. ....	154
Construction of emergency response system of sudden environmental pollution incidents /LI Yun, LIU Ji .....	159
A formula of the point-wise lower densities of the cantor measure /WANG Song-ran, WEN Yi-jun .....	163
A girding-based clustering routing algorithm for sensor networks /ZHAN Qiang, LIN Ya-ping .....	166
Multilevel security structure of campus network /XIAO Yang, LI Yang .....	170