

中 国 生 态 学 学 会 主办中国科学院生态环境研究中心







生态学报

(SHENGTAI XUEBAO)

第 44 卷 第 6 期 2024 年 3 月 (半月刊)

目 次

研究论文

基于自然-经济综合视角的碳排放强度与生态盈亏多情景模拟研究——以淮海经济区为例	•••••
	2199)
海岛碳排放核算与时空特征——以东山岛为例 赵佳文,晁云舒,肖 兰,等(2216)
中国碳排放脱钩效应、时空特征与驱动因素 王奕淇,黄涵祝(2228)
冻融季温带森林土壤真菌群落结构及功能类群对不同土壤有机碳输入的响应	
	2244)
长白山亚高山针叶林沼泽湿地碳源/汇沿水分环境梯度变化规律 李美霖,牟长城,孙梓淇,等(2256)
京津冀地区碳排放时空格局变化及其驱动因子 陈靖松,张建军,李金龙,等(2270)
基于形态学空间格局分析和最小累积阻力模型的城市生态安全格局构建——以厦门市为例	
	2284)
面向生境保护与连通性维护的鄂温克族自治旗生态空间划定 傅 强,张海明,张月蓉,等(2295)
近40年鄱阳湖区"三生空间"格局转型与空间异质机制 魏国恩,刘耀彬,李汝资,等(2308)
无定河流域防风固沙服务流动模拟 王国宇,李 晶,张 娅(2	2323)
近20年北方草原生态价值核算及其时空差异特征 张海燕,樊江文,黄 麟,等(2337)
城乡二元差异视角下横断山区县域尺度居民生计水平测度 王保盛,黄学渊,贺新军,等(2351)
华北平原冬小麦-夏玉米农田生态系统土壤自养和异养呼吸模型构建 吴丹咏,王秀君,雷慧闽(2364)
陕北黄土高原气象要素对植被覆盖的空间分异影响及风险探测 冶兆霞,张洪波,杨志芳,等(2379)
城市化对上海市城乡梯度上植物爆芽与展叶物候的影响 庄铭皓,赵生寿,毕 星,等(2396)
京津风沙源区 NPP 时空变化及其对治理工程实施的响应 赵恒谦,刘轩绮,刘 哿,等(2406)
基于广义线性混合效应模型的森林树木死亡研究 闫 明,陈艳梅,闫 静,等(2420)
根边缘细胞缓解土荆芥淋溶途径化感作用对苦荞麦代谢扰动的机制 龚意豫,谢媛怡,李玖一,等(2437)
暖湿化气候情景下喀斯特木本植物群落构建机制 刘橼锰,税 伟,江 聪,等(2452)
三峡库区消落带植被 NPP 估算——基于机器学习优化 CASA 模型 靳 专,胥 焘,黄应平,等(汽	2464)
中国城市植被物候变化及其对地表温度的响应 缪丽娟,余志巍,何 昱,等(2479)
土壤水分及其垂直分布对内蒙古草原冰草和冷蒿竞争的影响 孔茹洁,卫 洁,陈 清,等(2495)
植被与土壤特征对青藏高原不同程度退化草地的响应 杜志勇,丛 楠(2504)

六种海桑属红树植物根际真菌特征及其影响因子 李传恩,张 颖,王 芸,等 (2517)
数字技术赋能森林生态产品价值实现:理论阐释与实现路径 王晓丽,彭杨贺,杨丽霞,等 (2531)
土壤微生物网络复杂性预测黄土高原造林恢复生态系统多功能性 董政宏,张君红,何 佳,等(2544)
北京山区典型植被土壤水分对次降雨的响应 王坤悦,李旭红,余新晓,等(2561)
黄土高原南部麻栎不同群落类型乔木种群结构及演替模拟 张维伟,尹代皓,雷雨婷,等 (2572)
城市化和绿地类型对土壤跳虫群落及功能性状的影响 冯 钧,乔志宏,鄢麒宝,等 (2582)
一种灰茶尺蠖高效引诱剂的研制及其田间防效评价 韩宝瑜,黄光政,韩善捷,等 (2597)
花期杭白菊植株引诱菊小长管蚜的嗅觉和视觉线索及应用 曹 原,韩善捷,李 捷,等 (2609)
基于红外相机技术的白鹇日活动节律分化研究——以都庞岭和大围山种群为例
专论与综述
植物吸滞 PM _{2.5} 研究进展——从宏观到微观 房佳兴,李少宁,赵 娜,等 (2632)
灌丛资源及其管理利用研究进展 李愈哲,黄 麟,樊江文 (2646)
学术信息与动态
基于文献计量的人地系统耦合研究动态及热点

期刊基本参数: CN 11-2031/Q * 1981 * m * 16 * 474 * zh * P * ¥ 120. 00 * 1510 * 35 * 2024-03

封面彩图提供: 徐卫华 中国科学院生态环境研究中心 E-mail: xuweihua@ rcees.ac.cn

ACTA ECOLOGICA SINICA Vol.44, No.6 March, 2024 (Semimonthly) CONTENTS

Research Paper

Multi-scenario simulation of carbon emission intensity and ecological profit and loss from the perspective of nature and economy	
in Huaihai Economic Zone ······ YUAN Jianxun, FANG Bin, KAN Hongyun, et al (2	2199)
Calculation of carbon emission and its spatio-temporal characteristics in Dongshan Island, Fujian Province	
	216)
Research on the decoupling effect, spatio-temporal characteristics, and driving factors of carbon emissions in China	
	.226)
Soil fungal community structure and functional group in response to different soil organic carbon inputs in the temperate forest	2044)
during the freeze-thaw season	:244)
Variation of carbon source/sink of subalpine coniferous forested wetland along water environmental gradient in Changbai	
Mountains of China LI Meilin, MU Changcheng, SUN Ziqi, et al (2	
Spatio-temporal pattern of carbon emissions and its driving factors in the Beijing-Tianjin-Hebei region	
Construction of urban ecological security pattern based on MSPA and MCR Model: a case study of Xiamen	
LI Qianyu, TANG Lina, QIU Quanyi, et al (2	
Delineation of ecological space with habitat protection and connectivity maintenance functions in Evenki Autonomous county	
FU Qiang, ZHANG Haiming, ZHANG Yuerong, et al (2	295)
Pattern transformation and spatial heterogeneity mechanism of production-living-ecological spaces in Poyang Lake area in last	
40 years ····· WEI Guoen, LIU Yaobin, LI Ruzi, et al (2	2308)
Simulation and assessment of sand fixation service in the Wuding River Basin, China	
	2323)
Spatiotemporal variation characteristics of grassland ecosystem values and their differences in northern China from 2000 to 2020 ·	•••••
	2337)
Measuring the residents' livelihood levels at county-scale in the Hengduan Mountains Region from the perspective of urban-rural	
dichotomy differences WANG Baosheng, HUANG Xueyuan, HE Xinjun, et al (2	2351)
Soil autotrophic respiration and heterotrophic respiration models for winter wheat-summer maize rotation cropland in the North	
China Plain WU Danyong, WANG Xiujun, LEI Huimin (2	2364)
Spatial differentiation effects and risk detection of meteorological elements to vegetation cover on the Loess Plateau of northern	
Shaanxi ······ YE Zhaoxia, ZHANG Hongbo, YANG Zhifang, et al (2	2379)
Impact of urbanization on bud burst and leaf unfolding phenology of plants along urban-rural gradient in Shanghai, China	
	2396)
Spatio-temporal variation of Net Primary Productivity in the Beijing-Tianjin sandstorm source area and its response to the	ŕ
implementation of control projects	2406)
Studying forest tree mortality based on a generalized linear mixed-effects model	
Mechanism of root border cells alleviate metabolic disturbance of Fagopyrum tataricum by the allelopathy of eluvial pathway from	0)
Chenopodium ambrosioides)437\
Community assembly mechanisms of karst woody plants under climate warming and humidification	
LIU Yuanmeng, SHUI Wei, JIANG Cong, et al (2	

Estimation of vegetation carbon sink in fluctuation zone of Three Gorges Reservoir Area based on CASA Model optimized by
machine learning
Spatiotemporal variations in vegetation phenology across Chinese major cities and its response to surface temperature
MIAO Lijuan, YU Zhiwei, HE Yu, et al (2479)
Effects of soil water and its vertical distribution on competition between Agropyron cristatum and Artemisia frigida in the Inner
Mongolia grassland · · · · KONG Rujie, WEI Jie, CHEN Qing, et al (2495)
Responses of vegetation and soil characterisitics to degraded grassland under different degrees on the Qinghai-Tibet Plateau
DU Zhiyong, CONG Nan (2504)
Characteristics and influencing factors of rhizosphere fungi of six mangrove plants of the genus Sonneratia
LI Chuanen, ZHANG Ying, WANG Yun, et al (2517)
Digital technology empowering the value realization of forest ecological products: theoretical interpretation and implementation
path WANG Xiaoli, PENG Yanghe, YANG Lixia, et al (2531)
Soil microbial network complexity predicts the multifunctionality of afforestation restoration ecosystems on the Loess Plateau
DONG Zhenghong, ZHANG Junhong, HE Jia, et al (2544)
Response of soil moisture of typical vegetation to individual rainfall in Beijing mountain area
WANG Kunyue, LI Xuhong, YU Xinxiao, et al (2561)
Structural dynamics and succession simulation of the dominant populations in three types of Quercus acutissima community in
southern of the Loess Plateau
Effects of urbanization and greenspace types on community structure and functional traits of soil Collembola
FENG Jun, QIAO Zhihong, YAN Qibao, et al (2582)
Development of an efficient attractant of Ectropis grisescens (Lepidoptera: Geometridae) and evaluation on its control effect in
tea plantations
Chemical and visual cues from Chrysanthemum morifolium cultivar 'Hangbaiju' plant to attract Macrosiphoniella sanborni
during its blooming stage and their application against the aphid CAO Yuan, HAN Shanjie, LI Jie, et al (2609)
Daily activity rhythm differentiation of Silver pheasant (Lophura nycthemera) by using infrared camera: studying Dupangling
and Daweishan populations in Hunan Province, China TANG Jiamin, YANG Daode, CAO Yue, et al (2621)
Review and Monograph
Research progress on PM _{2.5} absorption by plants; from macro to micro FANG Jiaxing, LI Shaoning, ZHAO Na, et al (2632)
Research progress of shrub resources and their management and utilization LI Yuzhe, HUANG Lin, FAN Jiangwen (2646)

《生态学报》

Acta Ecologica Sinica

入选"中国科技期刊卓越行动计划":入围"中国科协生态学领域高质量科技期刊 T1 区"

《生态学报》是由中国科学技术协会主管,中国生态学学会、中国科学院生态环境研究中心主办的生态学高级专业学术期刊,半月刊,主编傅伯杰院士。本刊坚持百花齐放、百家争鸣,产生于科学性、立足于学术性、着眼于实践性、服务于社会性的办刊宗旨,依靠和团结广大生态学科研工作者,为生态学基础理论和应用研究搭建国内一流的学术交流平台,促进生态学研究深入发展,为我国培养和造就生态学科研人才,为国民经济建设和发展提供知识创新服务。

《生态学报》主要报道生态学重要基础理论和应用研究的原始创新性科研成果。所刊文章类型有:研究综述;研究论文;学术信息与动态;生态学新理论、新方法、新技术介绍;新书评介及开放实验室介绍等。《生态学报》为国内一流领军期刊;国际生态学Q1类期刊;期刊总被引频次居中国自然科学期刊第1名,影响因子居生态学学科中文期刊第1名;连年获得"中国百种杰出学术期刊"、"中国最具国际影响力学术期刊"和"期刊数字影响力100强"等荣誉称号;获得中国科协TOP50科技期刊和中国科协中文精品科技期刊建设项目资助;中国科协生态学领域高质量科技期刊T1区期刊;中国科技期刊卓越行动计划入选期刊。

办公室电话: 010-62941099

E-mail: shengtaixuebao@rcees.ac.cn

投稿网址: www.ecologica.cn

若未订阅,但需本刊某期纸质本,请联系科学出版社购买,电话:010-64017032,010-64017539

执行副主编 孔红梅 责任编辑 刘昕 全元 谢武双 于恩逸 朱晶莹 编辑 宗静 彭小琼 刘佩琼

生 态 学 报

(SHENGTAI XUEBAO) (半月刊 1981年3月创刊)

第44卷 第6期 (2024年3月)

编 辑 《生态学报》编辑部

地址:北京海淀区双清路 18号

邮政编码:100085 电话:010-62941099

www.ecologica.cn

shengtaixuebao@rcees.ac.cn

主 编 傅伯杰

主 管 中国科学技术协会

主 办 中国生态学学会

中国科学院生态环境研究中心地址:北京海淀区双清路 18号

邮政编码:100085

出版科学出版社

印 刷 北京宝昌彩色印刷有限公司

国内发行 全国各地邮局

邮发代号 82-7

国外发行 中国国际图书贸易总公司

发行代号 M670

订 阅 科学出版社期刊发行部

010-64017032,010-64017539

或扫描封底二维码

广告经营 京海工商广字第 8013 号

ACTA ECOLOGICA SINICA

(Semimonthly, Started in 1981)

Vol.44 No.6 (March, 2024)

Edited by Editorial board of

ACTA ECOLOGICA SINICA

Add: 18, Shuangqing Street, Haidian, Beijing 100085, China

Tel:010-62941099

www.ecologica.cn

shengtaixuebao@ rcees.ac.cn

Editor-in-chief FU Bojie

Supervised by China Association for Science and Technology

Sponsored by Ecological Society of China

Research Center for Eco-environmental Sciences, CAS Add:18, Shuangqing Street, Haidian, Beijing 100085, China

Published by Science Press

Add: 16 Donghuangchenggen North Street,

Beijing 100717, China

Printed by Beijing Baochang Color Printing Co., Ltd,

Beijing 100094, China

Subscribe by Science Press

Tel:010-64017032, 010-64017539

E-mail:journal@cspg.net

Domestic issue All Local Post Offices in China 82-7

Foreign issue China International Book Trading M670

Corporation

Add: P.O.Box 399 Beijing 100044, China







ISSN 1000-0933

CN 11-2031/Q

定价 120.00 元