



中文核心期刊(第八版)  
中国科技核心期刊

中国科学引文数据库来源期刊  
RCCSE 中国核心学术期刊



ISSN 1005-3409  
CN 61-1272/P

# 水土保持研究

RESEARCH OF SOIL AND WATER CONSERVATION

SHUITU BAOCHI YANJIU

第26卷第4期

2019年8月

# 4 2019

ISSN 1005-3409



9 771005 340194



主管 中国科学院  
主办 中国科学院  
水利部

水土保持研究所

## 目 次

1950—2015 年黄河下游河道排洪输沙时空演变 .....	颜明, 贺莉, 王彦君, 等(1)
晋西黄土区坡耕地不同下垫面水土流失对侵蚀性降雨的响应 .....	周晗, 严俊霞, 李洪建, 等(7)
桂西北喀斯特区不同退化程度石灰土有机碳与养分剖面分布特征 .....	何铁光, 俞月凤, 蒙炎成, 等(13)
等高反坡阶对滇中云南松林下碳储量及增量分配格局的影响 .....	李学峰, 宋娅丽, 王克勤, 等(19)
黄土丘陵第三副区典型淤地坝系结构特征分析 .....	宇涛, 李占斌, 陈怡婷, 等(26)
基于 DEM 的流域地貌特征分形量化研究 .....	陈兵, 彭芳, 李鹏, 等(31)
中国 3 类典型区 SRTMGL1 和 SRTMV4 精度对比分析 .....	吴宇鑫, 赵牡丹, 高志远, 等(36)
陕北黄土丘陵区刺槐人工林土壤生态化学计量特征 .....	刘愿, 陈云明, 梁思琦, 等(43)
绿洲化对土壤养分及化学计量特征的影响 .....	高君亮, 罗凤敏, 段娜, 等(50)
侵蚀强度对淮北土石山区土壤团聚体组成及稳定性的影响 .....	李肖, 陈晨, 林杰, 等(56)
黄土高原王东沟小流域土壤表层氮的空间分布 .....	赵晓芳, 黄明斌(62)
长江下游秦淮河流域径流变化及影响因素分析 .....	代晓颖, 许有鹏, 林芷欣, 等(68)
农田下垫面处理对降雨入渗的影响 .....	付玉娟, 祝陈梦媛, 张旭东, 等(74)
近 50 年半干旱典型草原区域不同时间尺度上的降水、径流研究 .....	张阿龙, 高瑞忠, 刘廷玺, 等(80)
淮河流域不同量级降雨时空分布特征及其影响因素 .....	朱继前, 韩美, 徐泽华, 等(87)
科尔沁沙丘—草甸梯级生态系统 CO <sub>2</sub> , CH <sub>4</sub> 和 N <sub>2</sub> O 通量特征 .....	程功, 刘廷玺, 王冠丽, 等(96)
赣江上游章水流域 1955—2015 年降雨量时空变化 .....	王永文, 刘惠英(105)
黄土丘陵沟壑区不同退耕草地土壤水分研究 .....	赵佰礼, 穆兴民, 高鹏, 等(111)
几种保水材料对砂质潮土水分参数的影响 .....	仝昊天, 韩燕来, 李培培, 等(116)
南方红壤丘陵区樟树林土壤水分动态变化 .....	戴军杰, 章新平, 吕殿青, 等(123)
基于最小数据集的东北风沙土农田耕层土壤质量评价指标 .....	乔云发, 钟鑫, 苗淑杰, 等(132)
水氮运筹对糜子生育后期干物质积累、转运及水氮利用效率的影响 .....	刘鹏, 杨刚, 常闻谦, 等(139)
黄土塬区高底墒条件下养分差别对冬小麦产量的影响 .....	李刚, 王亚萍, 李超, 等(146)
低氮胁迫下不同苦荞品种开花前土壤养分含量特征 .....	陈伟, 崔亚茹, 孙从建, 等(151)
青海柴达木盆地盐湖区 5 种盐生植物根—土复合体抗剪强度影响因素及评价 .....	余冬梅, 祁兆鑫, 刘亚斌, 等(157)
贵州省 1960—2014 年不同地貌类型的气温变化特征 .....	莫跃爽, 周秋文(166)
滇池流域富磷退化山区主要优势植物对土壤酶活性的影响 .....	黄娜, 周苙, 吴晓妮, 等(171)
三江平原气象水文干旱演变特征 .....	郑越馨, 吴燕锋, 潘小宁, 等(177)
基于 MODIS 的土壤含水量时空变化及干旱化程度分析 .....	郭焱, 于红博, 马梓策, 等(185)
2002—2016 年锡林郭勒草原干旱时空特征 .....	杜波波, 阿拉腾图娅, 包刚(190)
基于格点数据的华北地区气象干旱特征及成因分析 .....	周丹, 罗静, 郑玲, 等(195)
基于华北地区气象指数 SPI 干旱时空分析 .....	王江涛(203)
城市化背景下重庆市水生态系统服务价值评估及其影响因子分析 .....	邓灵稚, 杨振华, 苏维词(208)
近 200 年来渭河流域干旱洪涝事件特征 .....	刘引鸽, 胡浩楠, 周欢欢, 等(217)

基于 Ripley's K 函数的绿洲景观格局演变分析

——以张掖市甘州区为例..... 罗君, 孙振厅, 张学斌(224)

呈贡区近 30 年植被覆盖度时空变化特征与土地利用驱动 ..... 杨旭超, 张军, 李杰, 等(232)

生态脆弱区景观生态风险时空分异及其地形梯度分析

——以陕西省米脂县为例 ..... 刘迪, 陈海, 张敏, 等(239)

基于 SWAT 模型的张家口清水河流域土地利用情景变化对径流影响研究

..... 王磊, 刘亭亭, 谢建治(245)

重庆市南岸区城市边界扩张及生态环境效应研究 ..... 邹欣怡, 赵伟, 蒲海霞, 等(252)

黑土区坡耕地壤中水平迁移动力学模型研究 ..... 曹程鹏, 张飞, 段建明(259)

基于土地利用变化的高阳县生态系统服务价值和碳排放风险研究 ..... 汤峰, 殷彦玲, 张蓬涛, 等(265)

长江中游荆南三口河网地区生态系统健康评价 ..... 李静芝, 闫雪, 李景保(272)

皖南地区旅游产业—城镇化—生态环境耦合协调的时空演变 ..... 荣慧芳, 陶卓民, 刘琪, 等(280)

宁夏六盘山连片特困区生态环境与经济发展耦合协调研究 ..... 苏胜亮, 吴立峰(286)

基于土壤湿度与植被覆盖变化的黄土高原生态恢复项目适宜性评价 ..... 白子怡, 薛亮, 张翀(292)

基于功能空间分类的抚仙湖流域“3 类空间”时空格局变化 ..... 赵筱青, 李思楠, 谭琨, 等(299)

黄土高原近 40 年人类活动强度时空格局演变 ..... 赵亮, 刘宇, 罗勇, 等(306)

松花江流域土地利用变化及形成机理

——以哈尔滨段为例 ..... 盖兆雪, 孙萍, 张景奇(314)

农田保护补偿政策异质效应提升的障碍因素诊断

——以苏州市、成都市两个创新实践地区为实证 ..... 李海燕, 蔡银莺(321)

西南山地流域林地和草地保护评价研究

——以贵州赤水河流域为例 ..... 程东亚, 李旭东(328)

基于确定性系数模型的泸水市泥石流易发性评价 ..... 李益敏, 李馥豪, 赵志芳(336)

利用瞬态剖面法测定宽级配砾石土水力参数试验研究 ..... 胡凯, 陈晓清(343)

土地转出农户的生计资本分化及其生计策略变化 ..... 袁东波, 陈美球, 廖彩荣, 等(349)

岩溶断陷盆地土壤肥力空间异质性及影响因素 ..... 徐焯, 邓艳, 曹建华, 等(355)

滦河上游 3 种林分类型固碳释氧效益估算 ..... 郑森(363)

西北植被净初级生产力时空变化及其驱动因素 ..... 同琳静, 刘洋洋, 王倩, 等(367)

大理市诺邓传统古村落景观及演进特征 ..... 包蓉, 刘璐颖, 谢荣幸(375)

欢迎订阅 2020 年《水土保持研究》..... (42)

附图 ..... (封 2, 封 3)

期刊基本参数: CN 61-1272/P \* 1985 \* b \* A4 \* 378 \* zh \* P \* ¥40.00 \* 1000 \* 57 \* 2019-08

执行主编 赵丽英 编辑 张娜 辛小桂 英文编辑 王百群

## Contents

Temporal and Spatial Variation of Flood-Conveying and Sediment-Transporting Capacity of the Lower Reaches of the Yellow River During 1950—2015 .....	YAN Ming, HE Li, WANG Yanjun, et al(1)
Response of Soil and Water Loss on Different Underlying Surfaces of Sloping Farmland to Erosive Rainfall in the Loess Area of Western Shanxi Province .....	ZHOU Han, YAN Junxia, LI Hongjian, et al(7)
Profile Distribution Characteristics of Organic Carbon and Nutrients in Different Degraded Lime Soils in Karst Area, Northwest Guangxi Province .....	HE Tieguaung, YU Yuefeng, MENG Yancheng, et al(13)
Effects of Contour Reverse-Slope Terrace on Carbon Storage and Incremental Distribution in Understory Layer of <i>Pinus yunnanensis</i> Forest in Middle Yunnan Province .....	LI Xuefeng, SONG Yali, WANG Keqin, et al(19)
Analysis of Structural Characteristics of Typical Check Dam System in the Third Subregion of Loess Hilly Region .....	YU Tao, LI Zhanbin, CHEN Yiting, et al(26)
Research on the Calculation Method of FBM Characters of Watershed Topographic Feature Base on DEM .....	CHEN Bing, PENG Fang, LI Peng, et al(31)
Comparison Analysis of Accuracy of SRTMGL1 and SRTM V4 in Three Typical Regions of China .....	WU Yuxin, ZHAO Mudan, GAO Zhiyuan, et al(36)
Soil Ecological Stoichiometry Characteristics of <i>Robinia pseudoacacia</i> Plantation in the Loess Hilly Region of Northern Shaanxi Province .....	LIU Yuan, CHEN Yunming, LIANG Siqi, et al(43)
Soil Nutrient and Stoichiometry Characteristics in Process of Oasisization in the Ulan Buh Desert Oasis, Inner Mongolia .....	GAO Junliang, LUO Fengmin, DUAN Na, et al(50)
Effect of Erosion Intensity on Composition and Stability of Soil Aggregates in Rocky Mountain Area of Huaibei .....	LI Xiao, CHEN Chen, LIN Jie, et al(56)
Spatial Distribution of Nitrogen of Topsoil in the Wangdonggou Watershed of the Loess Plateau .....	ZHAO Xiaofang, HUANG Mingbin(62)
Analysis on Variation and Influencing Factors of Runoff in Qinhuaihe River Basin in the Lower Reaches of the Yangtze River .....	DAI Xiaoying, XU Youpeng, LIN Zhixin, et al(68)
Rainfall Infiltration Characteristics of Farmland Underlying Surfaces Treated with Different Practices .....	FU Yujian, ZHU Chenmengyuan, ZHANG Xudong, et al(74)
Study on Precipitation and Runoff at Different Time Scales in Semi-Arid Grassland Basin over the Past 50 Years .....	ZHANG Along, GAO Ruizhong, LIU Tingxi, et al(80)
Temporal-Spatial Distribution Characteristics and Factors of Different Magnitude Rainfall in Huaihe River Basin .....	ZHU Jiqian, HAN Mei, XU Zehua, et al(87)
Characteristics of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O Fluxes in Horqin Dune-Meadow Cascade Ecosystem .....	CHENG Gong, LIU Tingxi, WANG Guanli, et al(96)
Spatio-Temporal Changes of Precipitation in Zhang River Watershed in the Upper Region of Ganjiang Watershed During 1955—2015 .....	WANG Yongwen, LIU Huiying(105)
Study on Soil Moisture in Two Returning Farm-land Patterns in Gully and Hilly Region of the Loess Plateau .....	ZHAO Baili, MU Xingmin, GAO Peng, et al(111)
Effects of Application of Water-Retaining Materials on Water Infiltration and Water Retention Characteristics of Sandy Soil .....	TONG Haotian, HAN Yanlai, LI Peipei, et al(116)
Dynamics of Soil Water in <i>Cinnamomum camphora</i> Forest in the Red Soil Hilly Region of South China .....	DAI Junjie, ZHANG Xinping, LÜ Dianqing, et al(123)
Evaluation Indicators of Soil Quality in Plough Layer of Aeolian Sandy Land in Northeast China Based on Minimum Data Set .....	QIAO Yunfa, ZHONG Xin, MIAO Shujie, et al(132)
Effects of Water and Nitrogen Management on Dry Matter Accumulation, Transportation, and Water and Nitrogen Use Efficiency of Broomcorn Millet in the Late Growth Stage .....	LIU Peng, YANG Gang, CHANG Wenqian, et al(139)
Effect of Nutrient Difference on Yield of Winter Wheat Under the Condition of High Soil Moisture in the Loess Tableland .....	LI Gang, WANG Yaping, LI Chao, et al(146)
Characteristics of Soil Nutrient Contents in the Fields of Different Cultivated Varieties of <i>Fagopyrum tataricum</i> Before Flowering Under Low Nitrogen Stress .....	CHEN Wei, CUI Yaru, SUN Congjian, et al(151)
Factors Affecting Shear Strength and Contribution Evaluation of Root-Soil Composite Systems of Five Halophytes in the Salt Lake Region of Northwest Qaidam Basin, Qinghai Province .....	YU Dongmei, QI Zhaoxin, LIU Yabin, et al(157)
Characteristics of Temperature Change of Different Geomorphological Types in Guizhou Province from 1960 to 2014 .....	MO Yueshuang, ZHOU Qiwen(166)
Effects of Dominant Species on Soil Enzyme Activity in the Phosphorus-Enriched Degraded Mountain Area in the Lake Dianchi Watershed of Southwestern China .....	HUANG Na, ZHOU Yi, WU Xiaoni, et al(171)

---

Evolution Characteristics of Meteorological and Hydrological Drought in Sanjiang Plain .....	ZHENG Yuexin, WU Yanfeng, PAN Xiaoning, et al(177)
Analysis of Spatial and Temporal Variations of Soil Moisture Content and Drought Degree Based on MODIS .....	GUO Tao, YU Hongbo, MA Zice, et al(185)
Temporal and Spatial Characteristics of Drought in the Xilingol Grassland From 2002 to 2016 .....	DU Bobo, Alatengtuya, BAO Gang(190)
Characteristics and Causes of Meteorological Drought in North China Based on Grid Data .....	ZHOU Dan, LUO Jing, ZHENG Ling, et al(195)
Analysis on Spatiotemporal Pattern of SPI Drought Based on Meteorological Index in North China .....	WANG Jiangtao(203)
Valuing the Water Ecosystem Service and Analyzing Its Impact Factors in Chongqing City Under the Background of Urbanization .....	DENG Lingzhi, YANG Zhenhua, SU Weici(208)
Characteristics of Drought and Flood Events in the Weihe River Basin in the Past 200 Years .....	LIU Ying, HU Haonan, ZHOU Huanhuan, et al(217)
Analysis of the Characteristics and Changes of Landscape Pattern of Oasis in Ganzhou District of Zhangye City Based on Ripley's K Function .....	LUO Jun, SUN Zhenqi, ZHANG Xuebin(224)
Temporal and Spatial Variation Characteristics of Vegetation Coverage and Land Use Driving in Chenggong District in Recent 30 Years .....	YANG Xuchao, ZHANG Jun, LI Jie, et al(232)
Analysis of Spatial-temporal Distribution of Landscape Ecological Risk in Ecologically Vulnerable Areas and Its Terrain Gradient .....	LIU Di, CHEN Hai, ZHANG Min, et al(239)
Study on the Effect of Different Land Use Scenarios on Runoff in Qingshuihe Basin of Zhangjiakou Based on SWAT Model .....	WANG Lei, LIU Tingting, XIE Jianzhi(245)
Study on Urban Boundary Expansion and Ecological Environment Effect in Nan'an District of Chongqing City .....	ZOU Xinyi, ZHAO Wei, PU Haixia, et al(252)
Study on the Dynamics Model of Horizontal Migration of Interflow in Cropland in Black Soil Area .....	CAO Chengpeng, ZHANG Fei, DUAN Jianming(259)
Research on Ecosystem Service Value and Carbon Emission Risk of Gaoyang County Based on Land Use Change .....	TANG Feng, YIN Yanling, ZHANG Pengtao, et al(265)
Assessment on Ecosystem Health of the Three Outfalls River System Region in the Middle Reaches of the Yangtze River .....	LI Jingzhi, YAN Xue, LI Jingbao(272)
Temporal and Spatial Evolution of the Coupling Coordination Among Tourism Industry, Urbanization, Ecological Environment in Southern Anhui Province .....	RONG Huifang, TAO Zhuomin, LIU Qi, et al(280)
Research on Coupling and Coordination of Ecological Environment and Economic Development in Concentrated Destitute Area of Liupanshan Mountain in Ningxia Autonomous Region .....	SU Shengliang, WU Lifeng(286)
Evaluation on Suitability of Ecological Restoration Project in the Loess Plateau Based on Soil Moisture and Vegetation Cover Change .....	BAI Ziyi, XUE Liang, ZHANG Chong(292)
Spatial-temporal Pattern Change of 'Town-Agriculture-Ecological Space' in Fuxian Lake Basin Based on Functional Space Classification .....	ZHAO Xiaoqing, LI Sinan, TAN Kun, et al(299)
Temporal and Spatial Evolution of Human Impact Intensity on the Loess Plateau in Recent 40 Years .....	ZHAO Liang, LIU Yu, LUO Yong, et al(306)
Land Use Change and Formation Mechanism in Songhuajiang Basin .....	GAI Zhaoxue, SUN Ping, ZHANG Jingqi(314)
Obstacle Factors Diagnoses of Affecting the Improvement of Farmland Protection Compensation Policy Effect .....	LI Haiyan, CAI Yinying(321)
Research on Evaluation of Forestland and Grassland Protection in Southwest Mountainous Basin .....	CHENG Dongya, LI Xudong(328)
Assessment on Susceptibility of Debris Flow in Lushui Based on the Certain Factor Model .....	LI Yimin, LI Yuhao, ZHAO Zhifang(336)
Laboratory Investigation of Hydraulic Parameter of Wide-Grading Gravelly Soil by Using Instantaneous Profile Method .....	HU Kai, CHEN Xiaoqing(343)
Differentiation of Livelihood Capital of Farmers and the Change of Livelihood Strategy .....	YUAN Dongbo, CHEN Meiqiu, LIAO Cairong, et al(349)
Spatial Heterogeneity of Soil Fertility in Karst Faulted Basin and Its Influencing Factors .....	XU Ye, DENG Yan, CAO Jianhua, et al(355)
Estimation and Analysis of Carbon Sequestration and Oxygen Release Efficiency of Three Forest Types in the Upper Reaches of Luanhe River .....	ZHENG Miao(363)
Spatial and Temporal Dynamics of Net Primary Productivity and Its Driving Factors in Northwest China .....	TONG Linjing, LIU Yangyang, WANG Qian, et al(367)
Research on the Landscape and Evolution of Traditional Ancient Village of Nuodeng in Dali City .....	BAO Rong, LIU Luying, XIE Rongxing(375)

CNKI 中国知网 www.cnki.net

编号: CST-JIFR 2018 STBY

## 中国学术期刊影响因子年报(自然科学与工程技术·2018版)

期刊名称: 水土保持研究

主办单位: 中国科学院水利部水土保持研究所

学科类目: 农业基础科学

研究层次: 技术研究

CN/ISSN: 61-1272/P 1005-3409

### 一、影响力指数(CI)

他引TC			他引JIF			CI值	影响力指数(CI) 学科排序
本刊数值	学科最大值	学科最小值	本刊数值	学科最大值	学科最小值		
3773	15375	82	0.868	2.236	0.073	426.516	8/22

### 二、被引频次 (本刊发表的可被引文献在 2017 年度的被引频次)

本刊发表文献 被各种来源文献引用频次	2017 年发表文献		2016 年发表文献		2015 年发表文献		历年发表文献
	被引频次	他引频次	被引频次	他引频次	被引频次	他引频次	总被引频次
复合引用	96	93	501	461	657	598	8269
技术研究类统计源期刊引用	67	64	357	317	376	317	3730

### 三、影响因子(JIF)

影响因子种类	即年指标	影响因子	5年影响因子	他引5年影响因子	影响因子学科排序
复合 JIF	0.255	1.522	1.775	1.651	9/22
技术研究类 JIF	0.101	0.963	0.943	0.819	2/8

### 四、其他参考指标

基金论文比	平均引文数	引用半衰期	引用期刊数	被引半衰期	被引期刊数	他引总引比	互引指数	WEB即年下载率	WEB下载量/万次	量效指数
0.97	23	8.0	672	6.2	843	0.92	40.22	99	22.17	2.000

中国学术期刊(光盘版)电子杂志社  
 中国科学院文献计量评价研究中心  
 2018年10月18日

水土保持研究

RESEARCH OF SOIL AND WATER CONSERVATION

Shuitu Baochi Yanjiu

Bimonthly (Started in 1985)

双月刊 1985年创刊,1994年更名

Vol. 26 No. 4

第26卷第4期

总第135期 2019年8月

Total No. 135 Aug., 2019

主办单位	中国科学院水利部水土保持研究所	Sponsored by	Institute of Soil and Water Conservation, CAS & MWR
主管单位	中国科学院	Administrated by	The Chinese Academy of Sciences
主 编	王 飞	Editor-in-Chief	WANG Fei
编辑出版	《水土保持研究》编辑部 (陕西 杨凌 712100) (电话: 029-87012705)	Edited and Published by	Editorial Department of Research of Soil and Water Conservation (Tel: 029-87012705) (Yangling, Shaanxi, China, 712100)
印 刷	陕西天地印刷有限公司 (陕西 西安 710016)	Printed by	Shaanxi Tiandi Printing Co., Ltd. (Xi'an, Shaanxi, China, 710016)
国内发行	杨凌示范区邮政局	Distributed by	The Post Office of Yangling Demonstration Zone
订 购	全国各地邮电局(所)	Ordered by	Post Office all over the Country
国外发行	中国国际图书贸易总公司 (北京 399 信箱 100044)	Foreign distributed by	China International Book Trading Corporation (P. O. Box 399 Beijing 100044)

CN 61-1272/P ISSN 1005-3409 国内外公开发行 国内邮发代号: 52-211 国外发行代号: 4491Q

E-mail: research@ms.iswc.ac.cn http://www.iswc.ac.cn http://stbcyj.paperonce.org 定价: 40 元