

建筑科学

BUILDING SCIENCE

QK2144259

8

2021

第37卷 第8期
VOL.37 NO.8

◆ 中华人民共和国住房和城乡建设部主管

◆ 中国建筑科学研究院有限公司主办

可持续建筑 *Sustainable Building*



中国科技论文统计核心期刊
国际 CODEN 中心收录期刊
《中国科学引文数据库》来源期刊
国际连续出版物数据系统收录期刊
ICONDA 国际建筑文献数据库收录期刊
中国科技期刊文摘(CSTA)英文版
数据库收录期刊
《中国学术期刊(光盘版)
检索与评价数据规范》执行优秀期刊



建筑科学
JIANZHU KEXUE
(月刊)
第37卷 第8期(总第289期)
2021年8月出版
(1985年创刊)

主 办:中国建筑科学研究院有限公司
编 辑:《建筑科学》编辑部
地 址:北京北三环东路30号
邮 编:100013
电 话:010-64693291
电子邮箱(投稿邮箱):bjb365@126.com
主 编:黄世敏
副 主 编:徐 伟
“可持续建筑”编辑组

执行主编:俞英鹤
责任编辑:俞英鹤
美 编:陈 辛

* * * * *
印 刷:北京时捷印刷有限公司
国内发行:全国各地邮局订阅
国外发行:中国国际图书贸易总公司
(北京399信箱)
邮发代号:2-381
国外代号:BM4129
国内统一刊号:CN11-1962/TU
国外标准刊号:ISSN1002-8528
零 售:《建筑科学》编辑部发行室
广告经营许可证:京朝工商广字第0209
号(101)

目 次

计算分析

- 夏热冬冷地区新建平疫结合型体育馆空调方案初探 王翠灵,梁辰吉,李天成,聂亚洲,王宝龙,石文星(1)
西北旱区居住建筑蒸发冷却空调适用技术类型分析 刘艳峰,汪雨菲,周勇,王莹莹(9)
城市建筑集群能耗模拟(UBEM)与环境可持续导向的城市规划与设计:方法,工具和路径 杨峰,姜之点(17)
送风方式对数据中心气流组织影响的模拟研究 闵文科,孙小琴,李杰(25)

理论 & 实验

- 寒冷地区被动房过渡季自然通风策略的实测与模拟研究 李楠,杨建中,陈义波,崔国游(33)
夏季空调混合运行模式建筑室内热环境和人体热舒适研究 闫海燕,董梦如,杨璐璐,祁冰,高敬远,李梦,李辉,毕小芳(41)
低温地板辐射与低温层式通风耦合供暖模式热性能实验研究 孔祥飞,常宇帆,李晗(50)
寒冷地区热计量住宅不同采暖末端下人体热反应的对比研究 杨璐璐,闫海燕,董梦如,李梦,高敬远(59)
中等运动强度下人体热感觉与生理响应及其相关性实验研究 徐清浩,陈浩,陈琳,卞坤(67)
严寒地区办公建筑土壤源热泵系统运行策略优化研究 刘馨,鲁倩男,梁传志,冯国会,陈海洋,李画(79)
基于户外活动的严寒地区校园冬季热舒适度研究 金虹,乔梁,崔鹏(87)
夏季斯大林沿江公园散步人群动态热舒适研究 席天宇,秦欢,王浩舜,金虹(93)

- 秦巴山区夯土石板房夏季热环境测试研究 张涛,张琪玮,买亚锋(104)
郊区DTR与最大城市热岛强度的关系研究 李楠,陈光,贺敏杰,赵立华,蔡云楠(110)
极端热湿地区建筑被动蒸发冷却技术应用潜力实验研究 潘振皓,李琼,孟庆林(116)
垂直农业对办公建筑室内二氧化碳浓度的影响 邵一鸣,李加强,胡振宇,李斐,王文娟(123)
农宅南北外部空间的节能效益——以上海东庄村为例 黄子硕,熊俊杰,潘宸,王一(133)
实验室模拟与实地调查的声景评价对比研究 廉英奇,欧达毅,潘森森(139)
电池覆盖率对半透明晶体硅光伏窗的热性能影响研究 马胜兵,王勇,章文杰,白冰,周建伟(145)

- 冷水墙空调系统在建筑中的应用研究 张小波(152)

论 坛

- 建筑中人员在室时空特征的指标定义与调研分析 胡姗,燕达,江亿(160)
建筑外窗用新型隔热铝合金型材的研究 陈洪根,刘月莉,张龙,李武滔,李聪,黄林清,姜山,罗添禄(170)
零能耗装配式建筑示范屋设计探讨 吴向阳,杨壮,田玉豪(175)
平板型太阳能集热器三维动态传热计算模型开发与应用 李博佳,王敏,张昕宇,何涛(181)
建筑部门碳达峰碳中和排放控制目标研究 张时聪,王珂,杨芯岩,徐伟(189)
竹材人造板在建筑应用中的绿色价值潜力研究 吕瑶,杨尚杰,肖毅强(199)

* * * * *
[期刊基本参数] CN11-1962/TU * 1985 * b * 16 * 212 * zh * P * ¥ 15.00 * 8000 * 26 * 2021-08

BUILDING SCIENCE

(Monthly Journal)

No. 8 Vol. 37, August 2021

(Initial Issue in 1985)

Director: China Academy of Building
Research
Edited & Published: Editorial Committee of
BUILDING SCIENCE

Address: 30 Bei San Huan Dong Lu,
Beijing 100013, China

Tel: 86-10-64693291

E-mail: bjb365@126.com

Chief Editor: HUANG Shimin

Vice Chief Editor: XU Wei

"Sustainable Building" Editorial Team

Executive Chief Editor: YU Yinghe

Responsible Editor: YU Yinghe

Art Editor: CHEN Xin

* * * * *

Distributed in China:

Post Office Code Name 2-381

Distributed Abroad:

China International Book Trading
Corporation

(GUO JI SHU DIAN)

P.O.Box 399, Beijing, China

CONTENTS

Computational Analysis

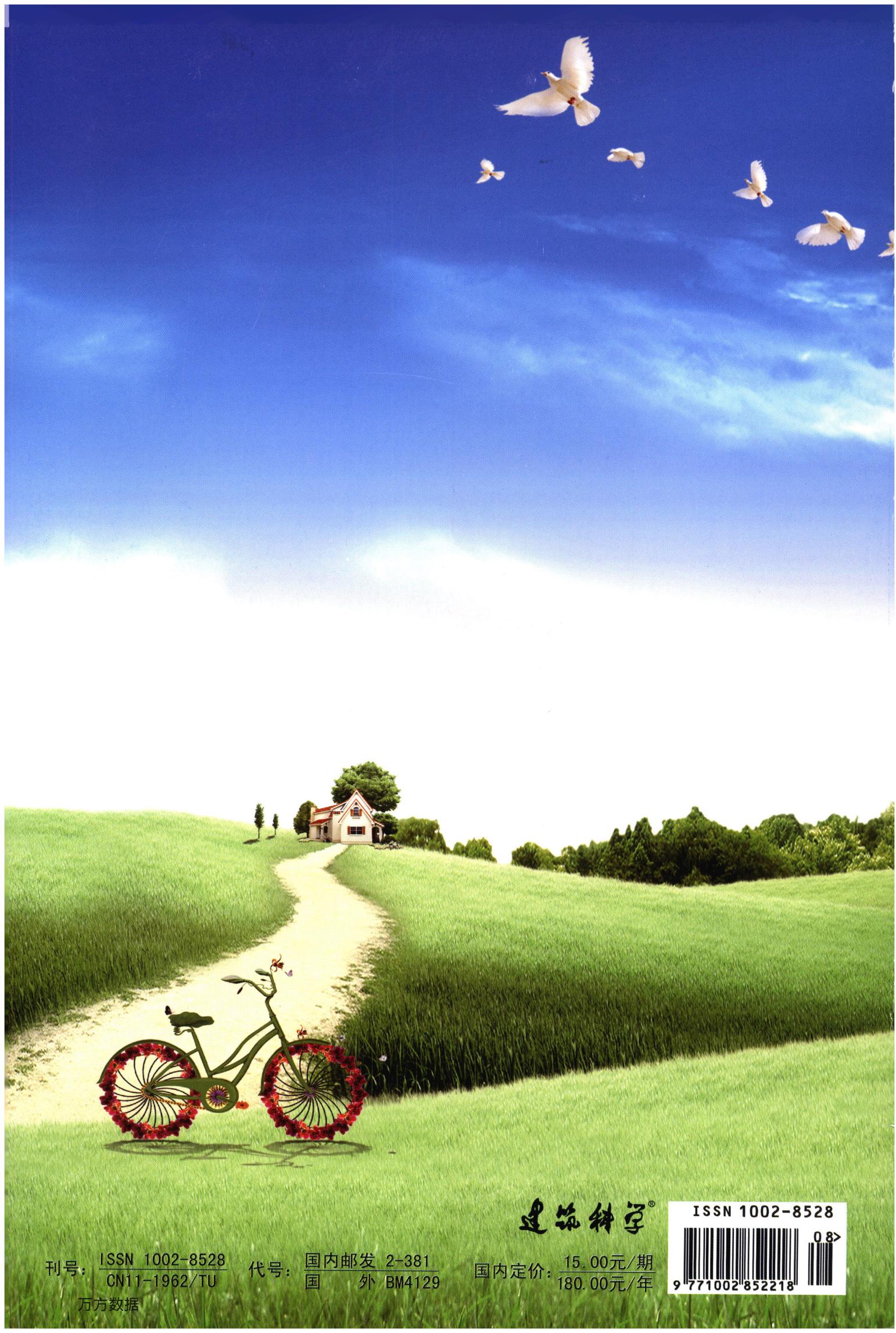
- Air-conditioning Scheme for Newly Built Gymnasiums Serving both General and Epidemic Control Purposes in Hot Summer and Cold Winter Areas WANG Cuiling, LIANG Chenjiyu, LI Tiancheng, NIE Yazhou, WANG Baolong, SHI Wenxing(1)
Analysis on Applicable Technology Types of Evaporative Air Conditioning for Residential Buildings in Arid Areas of Northwest China LIU Yanfeng, WANG Yufei, ZHOU Yong, WANG Yingying(9)
Urban Building Energy Modelling (UBEM) and Urban Planning and Design for Sustainable Neighbourhood Development: Methodologies, Tools and Approaches YANG Feng, JIANG Zhidian(17)
Simulation Study on the Influence of Air Supply Method on Air Distribution in Data Center MIN Wenke, SUN Xiaoqin, LI Jie(25)

Theoretical & Experimental Study

- Measurement and Simulation Study on the Natural Ventilation Strategies for Passive House in Cold Region during Transition Season LI Nan, YANG Jianzhong, CHEN Yibo, CUI Guoyou(33)
Study on Indoor Thermal Environment and Human Thermal Comfort of Air-conditioned Buildings with Mixed Mode Operation in Summer YAN Haiyan, DONG Mengru, YANG Lulu, Qi Bing, GAO Jingyuan, LI Meng, LI Hui, BI Xiaofang(41)
Experimental Investigation of the Thermal Performance on the Low-temperature Radiant Floor Coupled with Low-temperature Stratum Ventilation under Heating Mode KONG Xiangfei, CHANG Yufan, LI Han(50)
Comparative Study on Human Thermal Response Using Different Heating Terminals in Heat Metering Residential Buildings in Cold Area YANG Lulu, YAN Haiyan, DONG Mengru, LI Meng, GAO Jingyuan(59)
Experimental Study on the Correlation between Thermal Sensation and Physiological Response at Moderate Exercise Intensity XU Qinghao, CHEN Hao, CHEN Lin, BIAN Kun(67)
Study on the Operation Strategy Optimization of Ground-coupled Heat Pump System in Office Buildings in Severe Cold Region LIU Xin, LU Qiannan, LIANG Chuanzhi, FENG Guohui, CHEN Haiyang, LI Hua(79)
Research on Winter Thermal Comfort of Campus in Severe Cold Regions Based on Outdoor Activities JIN Hong, QIAO Liang, CUI Peng(87)
Study on the Dynamic Thermal Comfort of Strollers in Stalin Waterfront Park in Summer XI Tianyu, QIN Huan, WANG Haoshun, JIN Hong(93)
Test Study on Summer Thermal Environment of Rammed Earth Dwellings in Qinba Mountainous Area ZHANG Tao, ZHANG Qiwei, MAI Yafeng(104)
Study on the Relationship between Suburban DTR and the Maximum Urban Heat Island Intensity LI Nan, CHEN Guang, HE Minjie, ZHAO Lihua, CAI Yunnan(110)
Experimental Research on the Application Potential of Passive Building Evaporative Cooling in Extreme Hot-humid Region of China PAN Zhenhao, LI Qiong, MENG Qinglin(116)
Study on the Effects of Vertical Farming on Indoor Carbon Dioxide Concentration in Office Buildings SHAO Yiming, LI Jiaqiang, HU Zhenyu, LI Fei, WANG Wenjuan(123)
Energy-saving Potential of Courtyard Space in Farm House: A Case of Shanghai Dongzhuang Village HUANG Zishuo, XIONG Junjie, PAN Chen, WANG Yi(133)
Comparative Study on the Soundscape Evaluation between Laboratory Simulation and Field Investigation LIAN Yingqi, OU Dayi, PAN Sen sen(139)
Study on the Influence of Photovoltaic Cell Coverage Rate on the Thermal Performance of Semi-transparent Crystalline Silicon Photovoltaic Windows MA Shengbing, WANG Yong, ZHANG Wenjie, BAI Bing, ZHOU Jianwei(145)
Study on the Application of a Chilled Water Wall Cooling System in Buildings ZHANG Xiaobo(152)

Forum

- Index Definition and Investigation Research of Temporal-spatial Traits of Building Occupancy HU Shan, YAN Da, JIANG Yi(160)
Study on New Thermal Barrier Aluminum Alloy Profiles for Building External Windows CHEN Honggen, LIU Yueli, ZHANG Long, LI Wutao, LI Cong, HUANG Lingling, JIANG Shan, LUO Tianlu(170)
Preliminary Study on the Architectural Design of Zero-energy Consumption Prefabricated Model House WU Xiangyang, YANG Zhuang, TIAN Yuhao(175)
Development and Application of Three-dimensional Dynamic Heat Transfer Model for Flat Plate Solar Collectors LI Bojia, WANG Min, ZHANG Xinyu, HE Tao(181)
Research on Emission Goal of Carbon Peak and Carbon Neutral in Building Sector ZHANG Shicong, WANG Ke, YANG Xinyan, XU Wei(189)
Research on the Green Value Potential of Bamboo-based Panel in Building Application LYU Yao, YANG Shangjie, XIAO Yiqiang(199)



建筑科学[®]

ISSN 1002-8528



08>

刊号: ISSN 1002-8528
CN11-1962/TU

代号: 国内邮发 2-381
国 外 BM4129

国内定价: 15.00元/期
180.00元/年

万方数据