www.gysjqk.com

中国工业设计协会理事单位综合性专业设计杂志

总第189期 Apr. 2022

GONGYESHEJI

国际标准刊号: ISSN 1672-7053 国内统一刊号: CN23-1516/T



设计·运动·健康生活

DESIGN, SPORTS, HEALTHY LIFE



1SSN 1672-7053

响堂山石窟忍冬纹在旅游文化创意产品设计中的应用

Interpretation of Honeysuckle Pattern in Xiangtang Mountain Grottoes in tourism Cultural Creation design

DESIGN NO.4 CONTENTS 目录

专题报道

007 专题报道:以创意设计产业赋能龙江发展

主题资讯

008 虚拟纬度的城市慢跑者运动社区
009 面向日常运动的家用拉伸健康设备
010 智能家居有氧运动产品设计
011 VR技术将虚拟锻炼带入家庭
012 增强核心肌群训练的家用划船机设计

013 智能跑步机设计

014 最纯粹的肌肉活动和平衡训练设备设计

015 智能潜水面罩设计

016 未来主义的运动服装设计——让穿戴者"更健康、更快、更强壮"

017 以特殊方式使您保持锻炼状态的运动自行车设计

018 在家中实现健康和健身目标的运动器材设计

019 磁性锻炼设备设计:帮助您减轻在家工作时的"疼痛"

020 智能综合训练器设计

021 基于 AI 的家庭健身私人教练

9022 多功能健身车设计: 让健身和工作"同行"023 设计让您在喜爱的虚拟世界中自由奔跑

024 智能化的健身设备设计 与艺术结合的体育用品设计

025 让您爱上户外运动的自行车设计



科学与艺术

 026
 基于数字游戏的城市公共空间交互设计初探
 裴竟艺

 029
 基于数理认知的儿童数理逻辑类益智玩具设计研究
 马 琳

 032
 基于 TRIZ 理论的 ASD 儿童玩具设计研究
 缪佳桂 郑雯雯 张丙辰

高等美术教育

035 基于产业需求的工业设计专业生态化实践教学体系构建 付晓莉 车江宁 张伟杰 王 卓陈 骏 新工科背景下基于 OBE 理念的设计工程实践课程教学研究 041 一流专业建设背景下《工业设计机械基础》课程教学改革 滕佳华 044 虚拟仿真技术在环境设计专业教学中的应用研究 李 君 计算机辅助工业设计教学的问题及优化措施——以《儿童产品设计》课程为例 黄 坤 047 非物质文化遗产"醒狮"数字化设计课程的开发研究 050 李燕茹

设计与理论

053 果蔬废料制成材料在儿童玩具设计中的应用研究 李维立 韩立娜 056 基于行为研究的网球多球专项训练辅助产品设计 陈泽宇 059 针对女性用户的智能手环设计研究 张娜娜 刘遵月 徐嘉怡 胡昊琪 062 儿童农业科普玩具设计研究 065 城市道路导向标识设计研究 张 晶 068 基于图像符号学的品牌联名设计研究 宋晓旭 071 新媒体时代下城市设计类会展的标志设计趋势 何晓蓉 王 娟 商业插画在产品包装设计中的应用 074 刘沣元

1

-irst

INDUSTRIAL NO.4 CONTENTS 目录

077 城市双修理念下的城中村改造研究──以徐州市奎东村改造为例
 080 商业综合体中的儿童娱乐空间设计研究
 083 文化旅游视角下白城市湿地景观建筑设计研究
 086 城市公共环境标识的生态设计研究
 68 城市公共环境标识的生态设计研究

前沿与动态

王俊灵 胡艺帆 陈文静 089 基于可持续设计视角的社区共享五金工具服务系统设计 092 提升城市活力的市场设计研究 杨亚茹 2 Second 095 数据可视化设计在美妆类 APP 中的应用 马爱依 基于服务设计理念的老年患者医养结合康复 APP 设计 098 戴佳妮 夏敏燕 王逸豪 101 AR 增强现实技术在商业展示空间中的应用研究 张广超 王 爽 面向青年"蚁居族"的交互艺术装置情感化设计研究 洪启忱 李晓英 赵安琪 104 107 人工智能技术在工业设计中的应用 学慧ĺ 无人驾驶自卸冰雪车设计研究 金雅庆 杜豪杰 110

文化与传承

113	响堂山石窟忍冬纹在旅游文化创意产品设计中的应用	许妍娜	倪春洪	
116	乡村振兴背景下雷州潮溪村传统装饰工艺的创新研究	张博祎	彭雅莉	
119	基于蒙古马主题文化的广场景观设计研究	肖文娇	薛文峰	
122	浅析徽州马头墙中的设计符号学	庄德红	仲雪涵	
125	余荫山房满洲窗的艺术特征及文化内涵探析	杜 扬		
128	基于服务设计理念的彝族花腰服饰创新设计	彭 瑶	何 璞	成超承
131	基于皮尔斯符号学的中国民间传统竹器装饰研究	陈样子	陈思宇	
134	基于映射理论的宁化长征出发纪念馆文化创意产品设计	况范琼	林 伟	
137	乡村振兴视角下地方非物质文化遗产的创新发展——以盐城老虎鞋为例	张雪萍	张 军	陈建伟
140	乡村振兴背景下民族村寨居住环境改良设计研究——以大湘西地区牧笛溪村为例	杨雪铮		
143	符号学视阈下赫哲族婚服和苗族百鸟衣纹饰的比较研究	张少华	喻国伟	欧阳安
146	基于意象思维的瓷画龙江创意产品设计研究	李宛真		
149	绍兴乡村传统建筑元素在旅游文化创意产品设计中的应用	倪世明		

技术与实践

152基于层次分析法的机床设计元素排序研究李 凡 马 彧155面向山区救援的无动力下肢外骨骼外观设计研究黄秀琴158办公楼保洁车开发设计研究于丹彤 庄 严 冯帅帅

封二

智能健身镜设计

封三

《工业设计》杂志征订启事



DESIGN NO.4 CONTENTS 目录

SPECIAL COVERAGE

Special Coverage: Empower Development of Heilongjiang with Creative Design Industry

TOPIC INFORMATION

- 009 Home Stretching and Health Equipment for Daily Exercise
- 010 Design of Smart Home Aerobic Exercise Products
- 011 VR Technology Brings Virtual Workouts into the Home
- 012 Home-use Rowing Machine Design for Enhanced Core Muscle Group Training
- 013 Design of Smart Treadmill
- 014 Design of the Most Genuine Muscle Activity and Balance Training Equipment
- 015 Design of Smart Diving Mask
- 016 Futuristic Sports Apparel Design—Makes the Wearer "Healthier, Faster and Stronger"
- 017 Sports Bike Design that Keeps You Exercising in a Special Way
- 018 Exercise Equipment Design to Achieve Health and Fitness Goals at Home
- 019 Magnetic Exercise Device Design: Help You Reduce Your "pain" When Working at Home
- 020 Design of Intelligent Integrated Trainer
- 021 Al-based Home Fitness Personal Trainer
- 022 Design of Multi-functional Cycling Equipment: Make Fitness "Parallel" to Work
- 023 Designing Allows You to Run Freely in Your Favorite Virtual World
- 024 Design of Intelligent Fitness Equipment
 - Design of Sports Goods in Combination with Art
- 025 Bicycle Design Making You Love Outdoor Sports

SCIENCE AND ART

O26 Preliminary Exploration on Interactive Design of Urban Public Space Based on Digital Game Pe	i Jing	yi
--	--------	----

- 029 Research on the Design of Children's Mathematical Logic Educational Toys Based on Mathematical Cognition
- Research on Design of ASD Kid Toys Based on TRIZ Theory

Ma Lin

Miao Jiagui, Zheng Wenwen, Zhang Bingchen

HIGHER EDUCATION OF FINE ARTS

- 035 Construction of Ecological Practice Teaching System of Industrial Design Major Based on Industrial Demand Fu Xiaoli, Che Jiangning, Zhang Weijie
- 038 Teaching Research of Design Engineering Practice Course Based on OBE Concept in New Engineering Background
- 041 Teaching Reform for Course "Basics to Industrial Design Machinery" Under the Background of First-class Professional Construction
- Research on Application of Virtual Simulation Technology in Environmental Design Teaching The Problems and Optimization Measures of Computer-Aided Industrial Design Teaching-Taking "Children's 047 Product Design" as an Example
- Development and Research of Digital Design Course for Intangible Cultural Heritage "Dancing Lion"

- Wang Zhuo, Chen Jun
- Teng Jiahua
- Li Jun
- Huang Kun
- Li Yanru

DESIGN AND THEORY

044

- 053 Research on Applications of Materials Made from Fruit and Vegetable Wastes in Design of Kid Toys
- 056 Design of Tennis Training Aid Product Based on Behavior Research
- 059 Research on Smart Bracelet Design for Female Users
- 062 Children's Agricultural Science Toy Design Research
- 065 Research on Design of Guiding Logos for Urban Roads
- 068 Research on Co-branded Design Based on Image Symbology

- Li Weili, Han Lina
- Chen Zeyu

Song Xiaoxu

Zhang Nana, Liu Zunyue Xu Jiayi, Hu Haogi Zhang Jing



071 The Logo Design Trend of Urban Design Exhibition in the New Media Era He Xiaorong, Wang Juan 074 Application of Commercial Illustration in Product Packaging Design Liu Fengyuan Research on Urban Village Reconstruction Under the Concept of Double Urban Double Repair—Taking the 077 Transformation of Kuidong Village in Xuzhou City as an Example Zhou Jing, Xing Houlong 080 Research on Design of Children's Entertainment Spaces in Business Complexes Yang Qing, Gong Yibing 083 Research on Design of Wetland Landscape Buildings in Baicheng City from the Cultural Tourism Perspective Yuan Honggang, Ohen Zhongxing, Sun Nanan Ecological Design of Urban Public Environment Identification

FRONTIERS AND DYNAMICS

089	Design of Community Shared Hardware Tools Service System Based on Sustainable Design Perspective	Wang Junling, Hu Yifan, Chen WenJing
092	Research on Market Design to Enhance City Vitality	Yang Yaru
095	Application of Data Visualization Design in Beauty Makeup APP	Ma Aiyi
098	Rehabilitation APP Design for Elderly Patients Based on the Concept of Service Design	Dai Jiani, Xia Minyan, Wang Yihao
101	Application Research of AR Augmented Reality Technology in Commercial Display Space	Zhang Guangchao, Wang Shuang
104	Research on the Emotional Design of Interactive Art Installation for Youth "Ant Family"	Hong Qichen, Li Xiaoying, Zhao Anqi
107	The Application of Artificial Intelligence Technology in Industrial Design	Liu Huiying
110	Design of Unmanned Ice & Snow Dumping Truck	Jin Yaqing, Du Haojie

CI	LTURE AND INHERITANCE	
113	Interpretation of Honeysuckle Pattern in Xlangtang Mountain Grottoes in Tourism Cultural Creation Design	Xu Yanna, Ni Chunhong
116	Innovative Research on the Traditional Decoration Technology of Leizhou Chaoxi Village Under the Background	
	of Rural Revitalization	Zhang Boyi, Peng Yali
119	Research on Square Landscape Design Based on Mongolian Horse Theme Culture	Xiao Wenjiao, Xue Wenfeng
122	Analysis of Design Symboliology in Matou Wall in Huizhou	Zhuang Dehong, Zhong Xuehan
125	Analysis on the Artistic Characteristics and Cultural Connotation of Manchuria Window	Du Yang
128	Innovative Design of Yi Flower Waist Clothing Based on Service Design Concept	Peng Yao, He Pu, Cheng Chaocheng
131	Research on Traditional Bamboo Decoration Based on Pierce Symiotics	Chen Yangzi, Chen Siyu
134	Cultural and Creative Product Design of Ninghua Long March Departure Memorial Hall Based on Mapping	
	Theory	Kuang Fanqiong, Lin Wei
137	Thinking on Innovative Development of Local Intangible Cultural Heritage in Rural Revitalization—Taking	
	Yancheng's Tiger Shoes as an Example	Zhang Xueping, Zhang Jun, Chen Jianwei
140	Research on Improved Design for Residential Environment at Ethnic Villages in the Background of Countryside	
	Revitalization—Taking Mudixi Village in Greater Xiangxi Area as an Example	Yang Xuezheng
143	Comparative Research on Wedding Dress from Hezhe Nationality and Miao Nationality Birds Coat	
	Ornamentation in Symbolic View Threshold	Zhang Shaohua, Yu Guowei, Ouyang An
146	Research on Cultural and Creative Product Design of Longjiang Porcelain Painting Based on Image Thinking	Li Yuanzhen
149	The Application of Shaoxing Rural Traditional Architectural Elements in the Design of Tourism Cultural Creative	
	Products	Ni Shiming

TECHNOLOGY AND PRACTICE

152	Study on the Ranking of Machine Tool Design Elements Based on the Hierarchy Analysis Method	Li Fan, Ma Yu
155	Research on the Appearance Design of Unpowered Lower Limb Exoskeleton for Mountain Rescue	Huang Xiuqin
158	Research on the Development and Design of Office Building Cleaning Vehicle	Yu Dantong, Zhuang Yan, Feng Shuaishuai

SECOND COVER

Design of Smart Fitness Mirror

THIRD COVER

Subscription Info of Industrial Design

