

ISSN 1001-3563
CN 50-1094 / TB

全 国 中 文 核 心 期 刊

2021年3月 第42卷 第6期

主管单位：中国兵器装备集团有限公司

主办单位：中国兵器工业第五九研究所

包装工程

Packaging Engineering



融智能+活数据+万联网+创新设计

万方数据

包装工程

Packaging Engineering

第42卷 第6期 2021年3月20日

目次

专题：融智能+活数据+万联网+创新设计

- 负责任的人工智能与设计创新 王韞, 徐迎庆 1
- AI设计下的文本视觉问答技术 晋赞霞, 覃京燕, 殷绪成 7
- AI设计下的智能驾驶场景文本识别技术
梁敏, 秦海波, 覃京燕, 殷绪成 13
- 智能汽车中基于信任的接管系统交互设计
由芳, 张景卉, 张俊, 邓惠君, 刘雨佳 20
- 基于态势感知的汽车人机界面设计研究
王建民, 刘雨佳, 李阳, 由芳 29
- 应用于智慧物流服务的无人驾驶车产品设计 冉蓓, 覃京燕 37
- 虚拟数字人手势交互设计 王晓慧, 覃京燕 46
- 基于PAD情感模型的老龄智能陪伴机器人面部表情评估研究
吴磊, 孙悦 53
- 智慧健康养老产品适老化设计与老年用户研究方法
窦金花, 覃京燕 62
- 智能手机背面屏盲打输入法键盘布局设计研究
罗天伦, 邓清, 谭紫璇, 邱一耕, 武汇岳 69

工业设计

- 家用服务机器人人机交互亲密度意象研究
何人可, 王玥虹, 马超民 77
- 基于汉字表意构形特征的器物认知语意研究 郝小超, 覃京燕 83
- 基于随机森林算法的Web交互界面跳动型视觉流优化设计研究
韦艳丽, 刘煜炜, 周璇, 刘翰扬 92
- 基于FMEA和FTA的老年人汽车人机界面交互设计研究
李永锋, 陈则言 98
- 基于知识可视化的医患诊疗信息沟通策略研究
李晓英, 秦晶晶, 周大涛 106
- 基于GOMS模型的网上购物流程设计优化研究
苏畅, 周焱, 袁晓芳 113
- 叙述视角下的特色小镇服务设计研究 任英丽, 朱春艳 120
- 基于自然光采光用户调研的产品设计 黄赛, 刘键, 杜嘉宁 126
- 在线评论数据挖掘视角下的产品改良设计研究 李江泳, 张伟 135
- 基于积极体验的参数化产品设计模型 吴春茂, 高天, 孟怡辰 142
- 基于摆动液压阻尼的肩袖训练器设计
王英豪, 吴剑锋, 杨红春, 唐智川 151
- 基于香农—韦弗传播模式的应星楼路灯设计 乔宇, 胡辰韬 157
- 基于知识图谱的非遗产业化保护研究动态 段金娟, 宣艾祺 162

| | | |
|---------------------------|-------------------------|-----|
| 基于CVPA理论的文创产品审美反应与购买意愿研究 | 周爱民, 齐璐莎, 张书涛, 欧阳晋焱, 杨钊 | 171 |
| 基于Kano模型的新老年人餐饮服务系统需求权重研究 | 王思琦, 张寒凝 | 178 |
| 社区医疗卫生服务的体验评价研究 | 张亚玲, 汪晓春 | 184 |
| 基于AR技术的设计评价系统研究 | 董梦瑶, 高增桂, 刘丽兰 | 192 |
| 基于灰色聚类法的老年人APP用户界面配色评价研究 | 高帅, 朱丽萍, 李永锋 | 198 |
| 影响图标搜索绩效因素的研究进展 | 王宪宇, 李宏汀, 马舒 | 206 |
| 面向新生代流动人口的冰箱产品设计策略 | 于金月, 沈杰 | 212 |
| 贵州苗族服饰艺术特色在家具设计上的应用 | 陈映芬, 饶灵珊, 吕炜亮, 郭琼 | 220 |

视觉传达设计

| | | |
|-------------------------|------------------|-----|
| 基于符号修辞学的平面设计方法研究 | 支宇, 王冰滢 | 226 |
| 图标设计要素对视觉注意和舒适度的影响研究 | 胡莹 | 232 |
| 基于感性工学的马拉松赛事奖牌的设计研究 | 马东明, 孙山, 钱皓 | 239 |
| 区域文化背景下城市形象视觉识别系统构建策略研究 | 何祥文 | 247 |
| 基于模糊层次分析法的导视系统布局研究 | 刘欣童, 廖晨阳, 陈岚, 陈一 | 258 |
| 视触觉在公益主题交互设计中的价值 | 王建罡, 陈幼林 | 265 |

高校设计研讨

| | | |
|---------------------------|---------|-----|
| 日抛型隐形眼镜包装改良设计研究 | 万莹, 钟豪 | 272 |
| 光致变色材料的创新与时尚产品设计的应用 | 吴妍妍 | 279 |
| 基于流线型风格的电竞椅设计概念研究 | 尹洪, 方笑 | 284 |
| 中西文化背景对清代广作家具的影响 | 安舜, 方海 | 290 |
| 创新视角下材料在家具设计中的应用 | 梁岩 | 295 |
| 简约主义风格影响下的家具设计策略 | 张振, 郝婷 | 299 |
| 多功能家具的设计理念及方法研究 | 孟晓军 | 302 |
| 怀旧表征下的广府文化创意产品设计 | 姬文瑞, 李静 | 306 |
| 基于怀旧情感的越剧文创产品设计研究 | 项李, 王强 | 314 |
| 面向新生代消费者的养生茶服务设计研究 | 罗琴, 张瑞秋 | 321 |
| 基于羌族传统舞蹈文化的设计因子提取模型的建立与应用 | 刘靓 | 327 |
| 从凉茶品牌创新看传统与现代品牌的观念差异 | 杨敏 | 336 |
| “泉·城”文化景观视角下的公共设施设计导向研究 | 卜颖辉 | 340 |
| 视觉传达设计中的情感化表现研究 | 李列锋 | 345 |
| 现代平面设计中的民族化趋向探索 | 代蕾 | 349 |
| 平面设计中传统文化元素的渗透 | 赵利娜, 王锋 | 352 |
| 传统图案元素在视觉传达设计中的应用 | 丁艺 | 356 |
| 传统纹样在现代公共艺术中的应用探析 | 王锡金 | 359 |

信息索引

《融智能+活数据+万联网+创新设计》专题主编、序言介绍

期刊基本参数: CN 50-1094/TB*1980*s*A4*362*zh*P*¥45.00*5000*55*2021-03

PACKAGING ENGINEERING

(Initial Issue 1980) (Semimonthly) Vol.42 No.6 (Total No.444) Mar.20, 2021

Contents

Special Subject: AI &HI Emergence Intelligence+Live Data+Internet of Everything+Innovation Design

- Responsible AI and Design Innovation WANG Yun, XU Ying-qing 1
Text-based Visual Question Answering with AI Design
JIN Zan-xia, QIN Jing-yan, YIN Xu-cheng 7
Text Recognition Technology of Intelligent Driving Scene Based on AI Design
LIANG Min, QIN Hai-bo, QIN Jing-yan, YIN Xu-cheng 13
Interaction Design for Trust-based Takeover Systems in Smart Cars
YOU Fang, ZHANG Jing-hui, ZHANG Jun, DENG Hui-jun, LIU Yu-jia 20
Vehicle Human-Machine Interface Design Based on Situational Awareness
WANG Jian-min, LIU Yu-jia, LI Yang, YOU Fang 29
Product Design of Autonomous Vehicles Applied to Intelligent Logistics Services
RAN Bei, QIN Jing-yan 37
Gesture Interaction Design of Virtual Human
WANG Xiao-hui, QIN Jing-yan 46
Facial Expression Measurement of Aging Intelligent Companion Robot Based on PAD Emotion Model
WU Lei, SUN Yue 53
Senior-friendly Design of Smart Health Care Products and Research Methods for Elderly Users
DOU Jin-hua, QIN Jing-yan 62
Design of Keyboard Layout for Eyes-free Text Input on the Rear Screen of Smartphones
LUO Tian-lun, DENG Qing, TAN Zi-xuan, QIU Yi-geng, WU Hui-yue 69

Industrial Design

- Intimacy and Perceptual Imagery of Home-use Robot Interaction
HE Ren-ke, WANG Yue-hong, MA Chao-min 77
Cognitive Semantics of Artifact Based on Semantic Representation of Chinese Ideographs
XI Xiao-chao, QIN Jing-yan 83
Research on Optimization of Bounce Visual Flow Web Interface Based on Random Forest
WEI Yan-li, LIU Yu-wei, ZHOU Xuan, LIU Han-yang 92
Research on Automobile Human Machine Interface Interaction Design of the Elderly Based on FMEA and FTA
LI Yong-feng, CHEN Ze-yan 98
Information Communication Strategy of Doctor-Patient Diagnosis and Treatment Based on Knowledge Visualization
LI Xiao-ying, QIN Jing-jing, ZHOU Da-tao 106
Design and Optimization of Online Shopping Process Based on GOMS Model
SU Chang, ZHOU Yao, YUAN Xiao-fang 113
Service Design of Characteristic Towns from Narrative Perspective
REN Ying-li, ZHU Chun-yan 120
Product Design Based on Investigation of Natural Light Environment
HUANG Sai, LIU Jian, DU Jia-ning 126
Product Improvement Design from the Perspective of Online Comment Data Mining
LI Jiang-yong, ZHANG Wei 135
Parametric Product Design Model Based on Positive Experience
WU Chun-mao, GAO Tian, MENG Yi-chen 142
Design of Rotator Cuff Trainer Based on Oscillating Hydraulic Damping
WANG Ying-hao, WU Jian-feng, YANG Hong-chun, TANG Zhi-chuan 151
Design of Yingxinglou Street Light Based on Shannon-Weaver Communication Mode
QIAO Yu, HU Chen-Tao 157
Industrialization Protection Research Trends of Intangible Cultural Heritage Based on Knowledge Graph
DUAN Jin-juan, XUAN Ai-qi 162
Research on Aesthetic Response and Purchase Intention of Cultural and Creative Products Based on CVPA Theory
ZHOU Ai-min, QI Lu-sha, ZHANG Shu-tao, OUYANG Jin-yan, YANG Zhao 171
Research on Demand Weight of New-elderly Catering Service System Based on Kano Model
WANG Si-qi, ZHANG Han-ning 178

- Study on Experience Evaluation of Community Medical and Health Services
ZHANG Ya-ling, WANG Xiao-chun 184
- Design Evaluation System Based on AR Technology
DONG Meng-yao, GAO Zeng-gui, LIU Li-lan 192
- Color Matching Evaluation of APP User Interface for Elderly Based on Grey Clustering Method
GAO Shuai, ZHU Li-ping, LI Yong-feng 198
- Research Progress on Factors Affecting Icon Search Performance
WANG Xian-yu, LI Hong-ting, MA Shu 206
- Research on Refrigerator Design of New Generation Floating Population Based on Lifestyle Grouping
YU Jin-yue, SHEN Jie 212
- Application of Guizhou Miao Costume Art Feature in Furniture Design
CHEN Ying-fen, RAO Ling-shan, LYU Wei-liang, GUO Qiong 220

Visual Communication Design

- Study on the Graphic Design Method Based on Semiotic Rhetoric
ZHI Yu, WANG Bing-ying 226
- Effects of Icon Design Elements on Visual Attention and Visual Comfort
HU Ying 232
- Medal Design of Marathon Based on Kansei Engineering
MA Dong-ming, SUN Shan, QIAN Hao 239
- Construction Strategies of City Image Visual Identity System under the Circumstances of Regional Culture
HE Xiang-wen 247
- Overall Arrangement of Guide System Based on FAHP
LIU Xin-tong, LIAO Chen-yang, CHEN Lan, CHEN Yi 258
- The Value of Visual Touch in the Interaction Design of Public Welfare Theme
WANG Jian-gang, CHEN You-lin 265

Study of College Design

- Improved Package Design of Daily Disposable Contact Lens
WAN Xuan, ZHONG Hao 272
- Innovation of Photochromic Materials and Application in Fashion Product Design
WU Yan-yan 279
- Design Concept of Gaming Chair Based on Streamlined Style
YIN Hong, FANG Xiao 284
- Influences of Chinese and Western Cultural Background on Guang Style Furniture in Qing Dynasty
AN Shun, FANG Hai 290
- The Application of Materials in Furniture Design from the Perspective of Innovation
LIANG Yan 295
- Furniture Design Strategy under the Influence of Minimalism
ZHANG Zhen, HAO Ting 299
- Research on Design Concept and Method of Multifunctional Furniture
MENG Xiao-jun 302
- Design of Guangfu Cultural Creative Products under Nostalgic Representation
JI Wen-rui, LI Jing 306
- Design of Shaoxing Opera Cultural and Creative Products Based on Nostalgic Emotion
XIANG Li, WANG Qiang 314
- Design of Health Tea Service for New Generation Consumers
LUO Qin, ZHANG Rui-qiu 321
- Establishment and Application of Design Factor Extraction Model Based on Qiangs' Traditional Dancing Culture
LIU Liang 327
- The Conceptual Difference between Traditional and Modern Brands from the Perspective of Herbal Tea Brand Innovation
YANG Min 336
- Design Guidance of Public Facilities in "Spring · City" from the Perspective of Cultural Landscape
BU Ying-hui 340
- Research on Emotional Expression in Visual Communication Design
LI Lie-feng 345
- Nationalization Trend in Modern Graphic Design
DAI Lei 349
- The Infiltration of Traditional Cultural Elements in Graphic Design
ZHAO Li-na, WANG Feng 352
- Application of Traditional Pattern Elements in Visual Communication Design
DING Yi 356
- Analysis of the Application of Traditional Patterns in Modern Public Art
WANG Xi-jin 359