

ISSN 1001-3563
CN 50-1094/TB

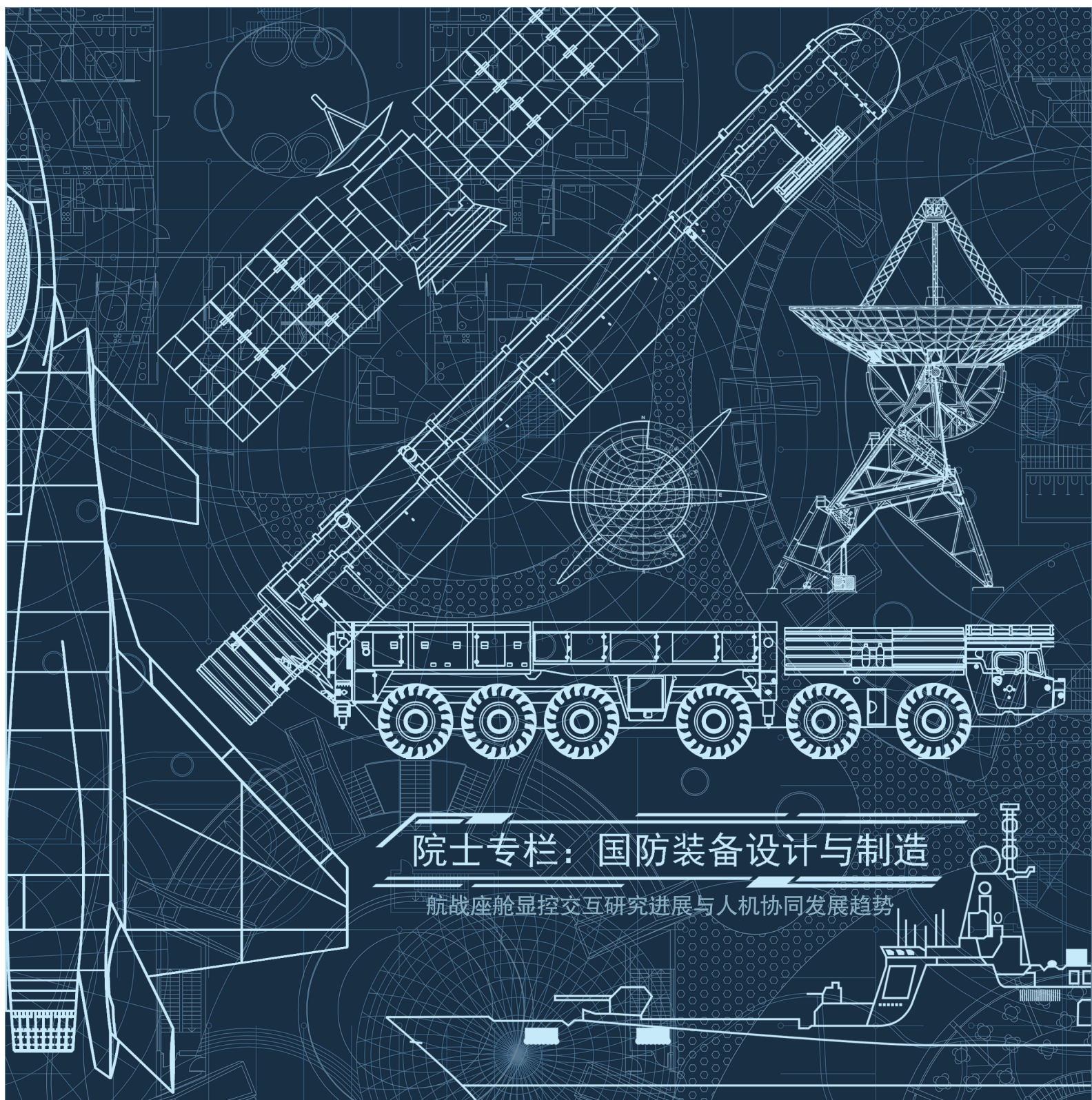
全 国 中 文 核 心 期 刊

2022年5月 第43卷 第10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



院士专栏：国防装备设计与制造

航战座舱显控交互研究进展与人机协同发展趋势

包装工程

第四十三卷 第十期

二〇二二年五月(下半月)

包装工程

Packaging Engineering

第43卷 第10期 2022年5月20日

目次

院士专栏：国防装备设计与制造

航战座舱显控交互研究进展与人机协同发展趋势

吴晓莉, 张蓝, 牛佳然, 刘潇, 韩炜毅 1

专题：符号·传播：北京冬奥会和冬残奥会吉祥物设计研究

2022年北京冬奥会吉祥物“冰墩墩”设计历程 曹雪, 钱磊 14

传播的仪式观视阈下冰墩墩顶流现象研究 刘平云, 江涛 28

吉祥物“雪容融”的符号价值研究 郭春方, 吴轶博, 徐嘉仪 32

特别策划

步态分析研究综述

张峻霞, 高昆, 谢兵 41

工业设计

信息设计的概念与方法研究 胡飞, 叶震宽 54

类人型机器人动作情感识别研究 李浩, 袁雪纯, 张千 66

汽车语音交互模型及设计策略 吴彦希, 杨随先, 刘行 73

电竞用户心流体验对感知价值和用户黏度的影响 温韬, 初笑男 80

基于Logistic回归的老年人APP用户体验优化设计

张璟, 李永锋, 朱丽萍 91

老年人睡眠健康产品适老化设计 齐延成, 马梦云 99

亮度对比及颜色组合对车载界面认知的影响

吴正新, 金涛, 顾浩然, 明成业 108

基于方差分析的轮毂造型特征显著性研究

魏君, 韩颖, 苏畅, 张英朝 115

以童车为载体的自闭症儿童交互干预设计 王小妍, 苏伟鸿 121

头戴式耳机耳垫材质舒适性评价指标体系研究

田婧娴, 谭征宇, 王海宁, 张瑞佛 129

基于眼动追踪的座椅造型用户认知差异研究

林鹭, 熊艳, 李勤政, 杨丹凤 136

基于F-AHP在坐躺两用办公椅设计中的应用研究 任英丽, 常虹 145

赛博朋克艺术在家具设计中的创新应用

胡若曦, 林泽文, 郭琼 152

基于动力学找形方法的非连续多重曲面拓扑重构研究

袁潮, 张啸, 邱松 158

基于过程链网络分析的代年检服务设计

吴剑锋, 姚吉, 卢晴淑, 黄薇 169

基于认知动机分析的儿童智能蔬菜种植装置设计

韩军, 朱紫君, 任梦雷 177

基于新文创视角的文化IP体系构建

刘潇, 周欣越 183

视觉传达设计

北京2022年冬奥会文化符号设计与传播价值研究 张蕊, 王瑾 190

基于语言编码的商标记忆规律研究 陈超, 陈飞虎 197

“新丑”在当代视觉设计语境下的价值与意义探析	杜昊宇, 唐昌乔	204
融媒体和新文创背景下科普IP形象设计创新方法	杨茂林	211
基于AHP层次分析法的儿童电子绘本角色面孔绘图方式研究	顾芮冰, 张丙辰, 张仁杰, 李寻, 杨俞玲	221
基于AHP的小型飞机座舱界面信息元素设计研究	任宏, 刘玉雪, 邹媛媛, 张宁宁	232
基于灰关联分析的器物纹样关联性传承设计方法	杨晓燕, 王立婷, 王伟伟, 岳奇	239

设计研讨

工业设计视阈下的设计驱动型品牌创新范式研究	郑刚强, 王志, 张梦	248
创新扩散视野下颈椎枕的产品设计策略研究	孟刚, 陈纾, 王原	257
协同创新团队设计资源优选匹配策略研究	杨梅, 郭皓月, 侯幸刚, 李雪瑞	265
基于协作意识的幼儿座椅创新设计	吴国荣, 陈旭辉, 赵谦	276
基于STAMP的民航进餐推车人因设计	徐江华, 郭慧凌	283
审美体验对用户可用性感知影响的元分析	廖毅, 鲁晓波, 张薇	293
基于熵权法的学龄前儿童教育APP角色绘图方式评价	李寻, 张丙辰, 杨俞玲, 顾芮冰, 韦懿洋	300
基于地域文化的文创产品设计新思路探索	马瑞果, 林伟	312
基于黎族传统民俗传承的文创产品设计	凌秋月	319
基于文化转译的桃花坞木版年画数字文创设计	刘媛霞, 殷俊	326
诗词意象在红色旅游文创中的应用研究——以毛泽东诗词为例	刘维尚, 李然, 王安琪	335
基于女性视角下的文创产品设计	李宏刚	343
基于废弃矿山改造的文化旅游产品设计	杨涵	346
包装设计中视觉语言的艺术化诠释	杨磊	355
传统吉祥图案在现代包装设计中的应用价值和策略研究	赵澈丽	358
水墨元素在包装设计中的应用探析	梁艳	361
竹元素的设计美及其在包装中的应用探究	李燕, 张雪	365
融入消费者满意度的牛奶包装设计	何璐君	372
“一带一路”背景下粉彩团花纹饰设计传承与创新	邵宇, 晏婷	378
从两宋素髹漆器样态及社会语境探究漆器的当代转型	张赛勇, 姜倩	386
知识图谱视角下的中国青铜器可视化分析	齐秀芝, 贺雪梅	396

高校成果展·汉唐文化

西安邮电大学成果展示		
西安邮电大学设计作品		
基于汉唐文化元素的文创产品设计	李永文	407
汉代四神纹融入毛绒玩具设计研究	令狐代文	414
凤翔泥塑现代适应性发展路径探义	王玉娟, 周著	421
数字媒体艺术专业人才培养体系创新与实践——以“汉风唐韵”主题艺术设计课程为例	刘贵	427

信息索引

产品包装设计	肖天为、黄建标、李本建、宋燕芳	封二
“广府好礼”广式糕点礼盒包装设计	姚傲雪、胡玲玲	封三

PACKAGING ENGINEERING

(Initial Issue 1980) (Semimonthly) Vol.43 No.10 (Total No.472) May20, 2022

Contents

Academician Column: Design and Manufacture of National Defense Equipment

Review of Display Control Interaction and Man-machine Coordination in Fighter Cockpit

WU Xiao-li, ZHANG Lan, NIU Jia-ran, LIU Xiao, HAN Wei-yi 1

Special Subject: Symbols · Communication: Design and Research of Mascots for Beijing Winter Olympic and Paralympic Games

Design Process of Bing Dwen Dwen, the Mascot of Beijing 2022 Winter Olympics

CAO Xue, QIAN Lei 14

Top-flow Phenomenon of Bing Dwen Dwen From a Ritual View of Communication

LIU Ping-yun, JIANG Tao 28

Symbolic Value of "Shuey Rhon Rhon"

GUO Chun-fang, WU Yi-bo, XU Jia-yi 32

Special Planning

Review of Gait Analysis

ZHANG Jun-xia, GAO Kun, XIE Bing 41

Industrial Design

Concept and Methods of Information Design

HU Fei, YE Zhen-kuan 54

Emotion Recognition of Humanoid Robot Action

LI Jie, YUAN Xue-chun, ZHANG Qian 66

In-Vehicle Voice Interaction Model and Design Strategies

WU Yan-xi, YANG Sui-xian, LIU Xing 73

Impact of Flow Experience of Electronic Sports Users on Perceived Value and User Stickiness

WEN Tao, CHU Xiao-nan 80

Optimization Design of Elderly APP User Experience Based on Logistic Regression

ZHANG Jing, LI Yong-feng, ZHU Li-ping 91

Design of Sleep Health Products for the Elderly

QI Yan-cheng, MA Meng-yun 99

Effects of Luminance Contrast and Color Combinations on IVIS Interface Cognition

WU Zheng-xin, JIN Tao, GU Hao-ran, MING Cheng-ye 108

Statistical Significance of the Wheel Hubs Styling Features Based on Variance Analysis

WEI Jun, HAN Ying, SU Chang, ZHANG Ying-chao 115

Interactive Intervening Design of Autistic Children with Buggy as Carrier

WANG Xiao-yan, SU Wei-hong 121

Evaluation Index System of the Comfortability of Headphone Earpad Material

TIAN Jing-xian, TAN Zheng-yu, WANG Hai-ning, ZHANG Rui-fo 129

Users' Cognitive Differences of Seat Modeling based on Eye Movement Tracking

Forest Heron Sichuan University

LIN Lu, XIONG yan, LI Qin-zheng, YANG Dan-feng 136

Application of F-AHP in the Design of Sitting and Lying Office Chairs

REN Ying-li, CHANG Hong 145

The Innovative Application of Cyberpunk Art in Furniture Design

HU Ruo-xi, LIN Ze-wen, GUO Qiong 152

Discontinuous B-rep Geometry Topology Reconstruction in Dynamic Form-finding Method

YUAN Chao, ZHANG Xiao, QIU Song 158

Design of Agent Annual Inspection Service Based on Process Chain Network Analysis

WU Jian-feng, YAO Ji, LU Qing-shu, HUANG Wei 169

Design of Intelligent Vegetable Planting Device for Children Based on Cognitive Motivation Analysis

HAN Jun, ZHU Zi-jun, REN Meng-lei 177

Construction of Cultural IP System from the Perspective of New Cultural Innovation

LIU Xiao, ZHOU Xin-yue 183

Visual Communication Design

Cultural Symbol Design and Communication Value of Beijing 2022 Winter Olympics

ZHANG Rui, WANG Jin 190

Laws of Memorizing Trademark Based on Verbal Coding

CHEN Chao, CHEN Fei-hu 197

- On the Value and Significance of "New Ugly" in the Context of Contemporary Visual Design
DU Hao-yu, TANG Chang-qiao 204
- Design and Innovation of Popular Science IP Image under the Background of Media Convergence and New Cultural and Creative Design
YANG Mao-lin 211
- Role Face Drawing Methods of Children's Electronic Picture Books Based on AHP Nalytic Hierarchy Process
GU Rui-bing, ZHANG Bing-chen, ZHANG Ren-jie, LI Xun, YANG Yu-ling 221
- Information Element Design of Cabin of Small Aircraft Based on AHP
REN Hong, LIU Yu-xue, ZOU Yuan-yuan, ZHANG Ning-ning 232
- Design Method of Relevance and Inheritance of Utensil Patterns Based on Grey Relational Analysis
YANG Xiao-yan, WANG Li-ting, WANG Wei-wei, YUE Qi 239

Design Discussion

- Study on Innovation Paradigm of Brand Driven by Design from the Perspective of Industrial Design
ZHENG Gang-qiang, WANG Zhi, ZHANG Meng 248
- Product Design Strategy from the Perspective of Innovation Diffusion
MENG Gang, CHEN Shu, WANG Yuan 257
- Optimal Matching Strategy of Design Resources of Collaborative Innovation Team
YANG Mei, GUO Hao-yue, HOU Xing-gang, LI Xue-rui 265
- Innovative Design of Children Seat Based on Collaborative Consciousness
WU Guo-rong, CHEN Xu-hui, ZHAO qian 276
- Human Factors Design of Civil Aviation Dining Cart Based on STAMP
XU Jiang-hua, GUO Hui-ling 283
- Meta-analysis of the Impacts of Aesthetics Experience on User's Perceived Usability
LIAO Yi, LU Xiao-bo, ZHANG Wei 293
- Evaluation of the Role Drawing Mode of Preschool Children's Educational APP Based on Entropy Method
LI Xun, ZHANG Bing-chen, YANG Yu-ling, GU Rui-bing, WEI Yi-yang 300
- Exploration of New Ideas for Cultural and Creative Product Design Based on Regional Culture
MA Rui-guo, LIN Wei 312
- Design and Innovation of Cultural and Creative Products Based on Li Traditional Folk Custom
LING Qiu-yue 319
- Digital Cultural Creative Design of Taohuawu New Year Woodblock Printings Based on Cultural Translation
LIU Yuan-xia, YIN Jun 326
- Application of Poetry Imagery in Red Tourism Cultural Creation: Take Mao Zedong's Poems as an Example
LIU Wei-shang, LI Ran, WANG An-qi 335
- Cultural and Creative Product Design Based on the Perspective of Women
LI Hong-gang 343
- Design of Cultural Tourism Products Based on the Reconstruction of Abandoned Mines
YANG Han 346
- Artistic Interpretation of Visual Language in Packaging Design
YANG Lei 355
- Application Value and Strategy of Traditional Auspicious Patterns on Modern Packaging Design
ZHAO Che-li 358
- Application of Ink Elements in Packaging Design
LIANG Yan 361
- Functional Beauty and Application of Bamboo Elements in Packaging
LI Yan, ZHANG Xue 365
- Milk Packaging Design with Consumer Satisfaction
HE Lu-jun 372
- Design Inheritance and Innovation of the Famille Rose Group Pattern Under the Background of "the Belt and Road"
SHAO Yu, YAN Ting 378
- Contemporary Transformation of Lacquerware from the State and Social Situation of PlainLacquerware in Song Dynasty
ZHANG Sai-yong, JIANG Qian 386
- Visual Analysis of Chinese Bronzeware from the Perspective of Knowledge Graph
QI Xiu-zhi, HE Xue-mei 396

College Achievements Exhibition · Han and Tang Culture

- Achievements of Xi'an University of Posts & Telecommunications
 Design Works of Xi'an University of Posts & Telecommunications
 Cultural and Creative Products Based on Cultural Elements of Han and Tang Dynasty
LI Yong-wen 407
- Integration of Traditional Culture into Cultural and Creative Products Design
LINGHU Dai-wen 414
- Development Path of Modern Adaptability of Fengxiang Clay Sculpture
WANG Yu-juan, ZHOU Zhu 421
- Innovation and Practice of Collaborative Training System for Digital Media Art Professionals: Taking the Art Design Course with the Theme of "Han Style and Tang Yun" As an Example
LIU Ben 427