

广播与电视技术



Radio & TV Broadcast Engineering

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中国邮政
微信订阅



2022年 | 第49卷 | 第2期

特别报道

- 10 2021年(第26届)全国广播电视技术能手竞赛决赛获奖结果揭晓
- 17 2021年(第26届)全国广播电视技术能手竞赛决赛一等奖(广播中心专业)获奖选手风采
- 21 2021年(第26届)全国广播电视技术能手竞赛决赛一等奖(电视中心专业)获奖选手风采
- 24 2021年(第26届)全国广播电视技术能手竞赛决赛一等奖(网络安全专业)获奖选手风采

热点·论点

智慧广电建设升级方案研究(下)

- 28 智慧广电服务体系升级建设思考 冯晴,朱玥,孙黎丽,宫良
- 32 智慧广电生态体系建设思考 刘文翰
- 36 智慧广电数据治理建设升级方案研究 刘康,王祎
- 40 智慧广电算法体系建设升级方案研究 高力,刘文翰

内容制播

- 44 基于广播融媒体演播系统的音频业务平台设计与实现 武开有
- 47 多级缓存架构CDN在融合媒体互动直播中的时延分析及应用 姜寅
- 52 电视台融合新闻系统建设探索与实践 侯臻
- 58 4K超高清远程制播系统架构分析及测试研究 万建,周桢,张万超
- 62 基于多模态融合的全媒体新闻智能编目系统设计 张随雨,俞定国,马小雨,钱永江
- 66 广电新媒体内容智能推荐算法实践研究 罗列异

传输覆盖

有线网络

- 71 有线数字电视系统IP广播分发网的关键技术研究及设计建设实践 陈欣



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《广播与电视技术》是由国家广播电视总局主管，国家广播电视总局广播电视规划院主办，《广播与电视技术》编辑部编辑出版的国家级技术期刊，是发布广播电视科技政策，反映事业建设成就，介绍高新技术，交流工作经验，传播各种信息的重要媒体。本刊主要面向各级广播电视行业主管部门、各级广播电台、电视台、网络公司、发射台、微波站、卫星站、节目制作单位及电教系统，同时对企业、工矿、学校、部队等具有公共广播电视设施的管理人员、技术人员也有参考价值。

为繁荣学术交流，本刊已加入《中国学术期刊网络出版总库》、“万方数据”和“维普中文科技期刊数据库”，有权选取部分论文在本刊关联平台（如广电猎酷网 www.lieku.cn、“广电猎酷”微信公众号等）发布，作者著作权使用费已随论文稿酬一次性给付。本刊充分尊重作者的原创成果并合理保护作者享有的权利，如作者不同意本刊之外其他形式的发布，请在来稿中声明，本刊将作适当处理。本刊及主办单位对本刊已发布作品的内容和观点不持有任何立场、不做出任何承诺或保证、不承担任何责任。

目次

全国百种重点期刊 专业核心科技期刊
投稿平台 tougao.lieku.cn



中国邮政
微信订阅

2022年 | 第49卷 | 第2期

- 76 电视购物三屏互动平台的设计与实现 江月山
- 80 基于TVOS机顶盒的自运行软件脚本的研究与应用 石鑫鹏, 邹飞非, 马振洲
- 84 基于有线网络的统一智慧业务云平台设计及实现 冒海波, 袁弼桓, 胡俊, 陈起, 栾书鹏

无线覆盖

- 89 基于IP组播的广电微波数字电视前端系统的设计与实现 秦伟
- 95 计及地形的高压塔对广播台站天线影响仿真技术研究 王叶鑫, 曹洪龙, 蔡晓梅, 刘学观
- 100 新型U波段圆极化电视发射天线的设计与安装 王麟
- 107 多路射频自动切换与下变频器的研制及应用 刘玮霞
- 113 调频广播传播预测方法分析与本地应用研究 闫本芳

卫星传输

- 116 卫星地球站4K超高清频道上星项目设计分析 黄展刚
- 121 窄带物联网信号对卫星广播电视接收的影响分析 梁宏伟, 高轩, 任新忠

安全播出与监测监管

- 125 广播电视行业网络安全防御的过程安全研究 唐彭卉, 周建威, 李亚玲
- 131 基于三级等保2.0的广电播控网络安全研究 李臻
- 137 市级全媒体指挥调度监管平台设计 朱恒飞, 杨卿, 蒋忠祥, 符泽宏

行业聚焦

- 142 敲黑板！浅谈伽马和色域空间

广告索引 P146



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2022年 | 第49卷 | 第2期

[44] 基于广播融媒体演播系统的音频业务平台设计与实现

宁波广播电视集团建设的广播融媒体演播系统为广播音频直播、网络视频直播、现场演播扩音、虚拟内容生产、音频内容录制等应用需求提供了内容生产和播出平台,有效弥补了原有广播直播系统在场空间、场景布局、专业灯光、技术设备等方面的局限,在推进广播媒体融合生产和拓展产业经营等方面发挥了积极作用,相关做法可资参考。

[71] 有线数字电视系统IP广播分发网的关键技术研究及设计建设实践

采用论文介绍的技术所建设的广电IP广播分发网目前负责承载直播类数字广播电视业务、IPTV业务、DTMB地面无线覆盖业务、广西无线发射台站业务,以较低的建设成本实现了广西全区绝大部分市、县、乡镇和农村的数字电视覆盖,受益群众超过700万,系统一直稳定运行,取得了良好社会效益和生态效益。论文所述的关键技术及设计建设方案可供业界同行参考借鉴。

[95] 计及地形的高压塔对广播台站天线影响仿真技术研究

高压塔对天线的覆盖范围影响,是广播台站规划建设中考要考虑的一项重要因素。在以往的影响分析中,缺少了将地形影响纳入到分析中,从而导致分析结果与实际效果产生偏差。本文提出的分析方法系统地分析了地形及单个高压塔对中波台站天线的影响,可以为相关的选址规划工作提供依据。

[125] 广播电视行业网络安全防御的过程安全研究

本文分析了广播电视网络安全的现状和存在的问题,提出“过程安全”的理念,强调将安全视为一个过程而不是产品,力图让广电安全技术人员在安全和业务效率中找到平衡点,保证广电网络安全在事前、事中、事后得到全程的监控分析,构建广播电视行业网络安全综合防控体系。



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Contents

One of Hundred National Key Periodicals
A Core Professional Sci-Tech Periodical
tougao.lieku.cn

Feb 2022 No.2

Special Reports

- 10 Finals Winners Announce of 2021 (26th) National Competition of Radio and Television Technicians
- 17 First Prize Winner Show of 2021(the 26th) National Competition of Radio and Television Technicians (Broadcasting Center)
- 21 First Prize Winner Show of 2021(the 26th) National Competition of Radio and Television Technicians (Television Center)
- 24 First Prize Winner Show of 2021(the 26th) National Competition of Radio and Television Technicians (Network Security)

Research on Upgrade Scheme for Intelligent Radio and Television Construction (II)

- 28 Thoughts on Upgrading the Construction of Intelligent Radio and Television Service System *By Feng Qing, Zhu Yue, Sun Lili, Gong Liang*
- 32 Thoughts on the Construction of Intelligent broadcasting Ecosystem *By Liu Wenhan*
- 36 Research on Upgrading Scheme of Intelligent broadcasting Data Governance Construction *By Liu Kang, Wang Yi*
- 40 Research on Construction and Upgrading Scheme of Intelligent Broadcasting Algorithm System *By Gao Li, Liu Wenhan*

Content Production & Broadcasting

- 44 Design and Implementation of Audio Service Platform Based on Broadcasting Converged Media Studio System *By Wu Kaiyou*
- 47 Delay Analysis and Application of Multi-level CDN Cache Architecture in Converged Media Interactive Live Broadcasting *By Jiang Yin*
- 52 Exploration and Practice on the Construction of Integrated News System for TV Station *By Hou Zhen*
- 58 Architecture Analysis and Test Research of 4K UHD Remote Production and Broadcasting System *By Wan Jian, Zhou Zhen, Zhang Wanchao*
- 62 Design of Multimodal Fusion-based Cataloging System for Omnimedia News *By Zhang Suiyu, Yu Dingguo, Ma Xiaoyu, Qian Yongjiang*
- 66 Research on Practice of Intelligent Recommendation Algorithm for Radio and TV New Media Content *By Luo Lieyi*

CATV

- 71 Research on Key Technologies and Design and Construction Practice of IP Broadcast Distribution Network in Cable Digital TV System *By Chen Xin*
- 76 Design and Implementation of Three-screen Interactive Platform for TV Shopping *By Jiang Yueshan*
- 80 Research and Application of Self-running Software Script Based on TVOS STB *By Shi Xinpeng, Zou Feifei, Ma Zhenzhou*
- 84 Design and Implementation of a Unified Smart Service Cloud Platform Based on Cable Network *By Mao Haibo, Yuan Bihuan, Hu Jun, Chen Qi, Luan Shupeng*

Wireless Coverage

- 89 Design and Implementation of Microwave Digital TV Front-end System in Radio and Television Based on IP Multicast *By Qin Wei*
- 95 Research on Simulation Technology of the Influence of High-voltage Towers on Radio Station Antennas Considering Topography *By Wang Yexin, Cao Honglong, Cai Xiaomei, Liu Xueguan*
- 100 Design and Installation of a New U-Band Circularly Polarized TV Transmitting Antenna *By Wang Lin*
- 107 Development and Application of Multi-channel Radio Frequency Automatic Switching and Down Converter *By Liu Weixia*
- 113 Analysis and Local Application Research on Propagation Prediction Method for Analogue FM Broadcasting *By Yan Benfang*

Satellite Transmission

- 116 Design and Analysis of Satellite Uplink Project for 4K UHD Channel in Satellite Earth Station *By Huang Zhangang*
- 121 Influence Analysis of NB-IoT Signal on Satellite Radio and Television Reception *By Liang Hongwei, Gao Xuan, Ren Xinzhong*

Safe Broadcasting & Monitoring and Supervision

- 125 Research on Process Security of Network Security Defense in Radio and Television Industry *By Tang Penghui, Zhou Jianwei, Li Yaling*
- 131 Research on the Security of Radio and Television Broadcast Control Network Based on Three-level Classified Security 2.0 *By Li Zhen*
- 137 Design of Omni-media Command and Dispatch Supervision Platform at Municipal Level *By Zhu Hengfei, Yang Qing, Jiang Zhongxiang, Fu Zehong*



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Index

Feb 2022 No.2

[44] Design and Implementation of Audio Service Platform Based on Broadcasting Converged Media Studio System

Broadcasting converged media studio system built by Ningbo Radio and TV Group provides a content production and broadcast platform for audio live broadcasting, web video live broadcasting, live broadcasting amplification, virtual content production, audio content recording and other application needs, effectively making up for the limitations of original broadcast system in site space, scene layout, professional lighting, technical equipment, etc. It plays a positive role in promoting converged production of broadcast media and expanding industrial operation. Related practices are available for reference..

[71] Research on Key Technologies and Design and Construction Practice of IP Broadcast Distribution Network in Cable Digital TV System

Radio and television IP broadcast distribution network constructed by using the technology introduced in the paper is currently responsible for carrying live digital radio and television services, IPTV services, DTMB terrestrial wireless coverage services and Guangxi wireless transmitting station services. With low construction cost, it has realized digital television coverage of most cities, counties, towns and rural areas in Guangxi, which benefits more than 7 million people. The system has been operating stably and has achieved good social and ecological benefits. Key technologies and design and construction schemes described in this paper can be used for reference by peers in the industry.

[95] Research on Simulation Technology of the Influence of High-voltage Towers on Radio Station Antennas Considering Topography

The impact of high-voltage towers on antenna coverage is an important factor that needs to be considered in planning and construction of broadcasting station. In previous impact analysis, terrain impact was not included in the analysis, which led to deviations between analysis results and actual results. The analysis method proposed in this paper systematically analyzes the influence of terrain and a single high-voltage tower on the antenna of medium wave station, which can provide a basis for related site selection and planning.

[125] Research on Process Security of Network Security Defense in Radio and Television Industry

This paper analyzes current situation and existing problems of radio and television network security, puts forward the concept of "security in the process", emphasizes that safety is regarded as a process rather than a product, and strives to enable radio and television security technicians to find a balance between safety and business efficiency. It ensures that radio and television network security has been monitored and analyzed throughout the whole process, and builds a comprehensive network security prevention and control system for radio and television industry.