

广播与电视技术

2018 1
第二届全国期刊奖百种重点期刊

Radio & TV Broadcast Engineering

全国百种重点期刊 专业核心科技期刊

第45卷 第1期 VOL.45 NO.1

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电话: 0512-68079850 68079851 68079852 68079853 68258269 68090809
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ISSN 1002-4522



9 771002 452005

国家新闻出版广电总局 主管
国家新闻出版广电总局广播电视规划院 主办



主管：国家新闻出版广电总局
主办：国家新闻出版广电总局广播电视规划院

邮发代号：82-464

编辑出版：广播电视规划院信息研究所

主 编：谢锦辉

顾问主编：赵兴玉

执行主编：何剑辉

副 主 编：卢 群

编 辑：房 磊 王海平

王贵琴

市场总监：谢 婧

发 行 处：胡 南

美 编：沙永丽

通讯地址：北京 2116 信箱 (100866)

电 话：010-86093619 (编辑部) 010-86092081 (市场部)
010-86092040 (发行部)

传 真：010-86093592

投稿网址：tougao.lieku.tv

国内总发行：北京报刊发行局

订 购 处：全国各地邮局

国外总发行：中国出版对外贸易总公司 (北京 728 信箱 100011)

广告经营许可证：京西工商广字 0029 号

国内定价：20.00 元 / 本 国外定价：20 美元 / 本

刊 号：ISSN 1002-4522

CN11-1659/TN

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全国百种重点期刊 专业核心科技期刊
tougao.lieku.tv

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主管：国家新闻出版广电总局
主办：国家新闻出版广电总局广播电视规划院

邮发代号：82-464

《广播与电视技术》是由国家新闻出版广电总局主管，国家新闻出版广电总局广播电视规划院主办，信息研究所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.tv、“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。

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主管：国家新闻出版广电总局
主办：国家新闻出版广电总局广播电视规划院

邮发代号：82-464

全国百种重点期刊 专业核心科技期刊

导 读 tougao.lieku.tv

中国邮政
微信订阅



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〔16〕 SDN/NFV 技术在未来城域网中的应用

目前网络承载的业务呈现两大趋势：一是业务本身的高带宽、低时延、海量链接的发展趋势；二是互联网化带来的业务服务方式的泛在化、云化。这促使运营商在不断优化覆盖、提高接入和互联带宽等基础网络能力的同时，开始思考网络服务方式的变革。本文结合未来网络的业务需求分析，介绍了未来城域网的架构，以及 SDN/NFV 技术在其中的应用方式，值得同行借鉴参考。

〔32〕 广东 4K 超高清电视应用和产业发展规划

本文以广东省广电系统推进 4K 超高清电视应用和发展为例，简要介绍广东省开展 4K 超高清电视应用的基本思路、主要措施以及预期目标。广东省广电积极探索高新技术在电视媒体中的应用，深化传统媒体与新兴媒体的融合发展，在全国率先建成以 4K 超高清应用为标志的新数字家庭示范区。

〔37〕 全媒体数据挖掘和收视分析模块的设计与实现

浙江广播电视集团建设的全媒体融合汇聚互动平台可为全媒体业务制作发布提供全面、统一的信息汇聚服务。其中的收视分析和数据挖掘模块既可以无缝整合各 APP、3G/4G 摄像机信号回传系统、收录系统、热线电话平台、通联报料系统等自身海量的资源，还可以通过聚类的数据进行智能化处理并统一汇总，自动形成当下各舆情热点和新闻焦点，为新闻制作等其他系统提供丰富的素材资源，为频道开展节目互动策划、热点主题发酵提供辅助决策功能。本文介绍这一模块的设计与实现，希望有助于新媒体产业的经营，推动媒体融合发展。

〔63〕 基于 EPG 信息实现广播电视直播节目搜索方案的分析

电子节目菜单 EPG 在数字电视发展较早的国家中已得到广泛的应用，本文根据现有 EPG 信息内容和 EPG 系统现状，分析了广电网络现有的直播节目模式，提出一种直播节目的 EPG 信息的优化处理方法，探讨基于处理后的 EPG 信息实现广播电视直播节目搜索的技术方案，有益于解决同类问题时开阔思路。

〔88〕 超长距离光纤传输技术在牧区地面无线数字电视覆盖中的应用

中央节目无线数字化覆盖工程解决了地广人稀的西部地区群众收听收看中央节目的问题，但本地广播电视节目的传输还需要克服距离远、地形复杂的问题。本文对 1550nm 超长距离光纤传输技术和 SDH 传输技术进行了对比，以新疆巴音郭楞蒙古自治州地面数字电视覆盖为案例进行了技术分析，提出选择 1550nm 传输技术实现本地节目长距离传输的方案，并在实际运行中取得了良好的经济效益和社会效益。

〔109〕 基于情感分析的微博舆情监管系统设计与实现

微博作为新媒体的一个重要网络舆情源头正深刻地影响着我国社会舆论的生成与演变。构建和完善微博舆情监管平台，最大限度实现对各类突出网络风险及时准确预测预警、科学有效防范，是新闻出版广播影视监管部门的重要工作。本文介绍海南省广播电视互联网监察监测中心以情感分析技术为基础，利用搜索、分析等技术设计的监管系统，供大家参考。



Competent Authority:
State Administration of Press, Publication, Radio, Film and Television
Sponsor: Academy of Broadcasting Planning, SAPPRFT

Publisher: The Institute of Information Research, ABP

Chief Editor: Xie Jinhui

Consultant Chief Editor: Zhao Xingyu

Executive Chief Editor: He Jianhui

Deputy Chief Editors: Lu Qun

Editors: Fang Lei Wang Haiping

Wang Guiqin

Advertising Director: Xie Jing

Circulation Coordinator: Hu Nan

Art Editor: Sha Yongli

Tel: (86-10) 86093619 (Editor)

(86-10) 86092081 (Market)

(86-10) 86092040 (Circulation)

Advertising: (86-10) 86091604

Fax: (86-10) 86093592

Web Address: tougao.lieku.tv

Address: P.O.Box 2116, Beijing, P.R.China

Post Code: 100866

Postal Distributing: Code 82-464

Journal Number: ISSN 1002-4522 / CN11-1659/TN

Prices: RMB 20 for one copy (in China)

USD 20 for one copy (outside China)

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A Core Professional Sci-Tech Periodical
tougao.lieku.tv

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Competent Authority:

State Administration of Press, Publication, Radio, Film and Television

Sponsor: Academy of Broadcasting Planning, SAPPRFT

Radio & TV Broadcast Engineering (RTBE) is a state-class technical journal, approved by the General Administration of Press and Publication, PR of China, authorized by the State Administration of Press, Publication, Radio, Film and Television (SAPPRFT), PR of China, sponsored by Academy of Broadcasting Planning (ABP), SAPPRFT, and published by the Institute of Information Research, ABP. RTBE is an important medium, that publishes scientific and technological policies in broadcasting, reports achievements in building broadcasting cause, introduces high and new technologies, exchanges work experience and spreads various information. RTBE is mainly geared to the needs of departments responsible for the work of radio & TV industry at all levels, radio & TV stations at all levels, network companies, transmitting stations, microwave stations, satellite stations, program production units and electrified education systems, as well as is of reference value to managerial and technical personnel for public radio & TV facilities in industrial and mining enterprises, educational institutions, troops and so on.

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[16] Application of SDN/NFV Technology in Metropolitan Area Networks

At present, network businesses present two major trends: the one is with high bandwidth, low delay and massive links; the other is providing ubiquitous services based on cloud. It continuously makes operators to optimize the coverage, increase accesses and the interconnected bandwidth and other basic network capabilities, what's more, to think about the network service revolution. Combined with the business requirement, this paper introduces the framework of metropolitan area network and SDN/NFV technology applications. It is worth the colleagues to reference.

[32] 4K Ultra-high Definition Television Application and Industry Development in Guangdong

This paper briefly introduces the basic strategy, the major measures and the projected objective of 4K Ultra HD TV application in Guangdong province. It explores the application of advanced technology in television, promotes the convergent development of traditional media and new media.

[37] Design and Implementation of Omni-media Data Mining and Audience Rating Analysis Module

The omni-media convergent interactive platform of Zhejiang Radio and Television Group provides a comprehensive and uniform information gathering, on which the audience rating analysis and data mining module could seamlessly integrate massive resources such as APPs, 3G/4G camera signal transmission systems, recording systems, hotline platform and informant communication systems. It intelligently processes the gathered data and automatically generates the hot public opinion and the focused news. It provides abundant materials for news production and makes auxiliary decisions for program interaction planning and hot topic keeping. This paper introduces the design and implementation of this module. Hope to be helpful for new media industry and media convergence.

[63] Live Broadcasting Program Searching Scheme Based on EPG

Electronic Program Guide (EPG) has been extensively applied in countries where the DTV is developed much earlier. This paper analyzes the live program in broadcasting network according to the EPG information and the EPG system status. It proposes an optimization of EPG information processing for live programs and explores the live program searching method based on the processed EPG information. This paper is beneficial to solve the problems of the same kind.

[88] Ultra-Long Haul Optical Fiber Transmission Technology for DTTB in Pastoral Areas

DTTB based central program coverage project makes people in the west sparsely-populated China could watch central programs conveniently. But the programs need to be transmitted locally in long distance and complex terrain. This paper compares the 1550nm ultra-long haul optical fiber transmission technology and SDH technology. It analyzes a case of DTTB in Bayingolin of Xinjiang Autonomous Region, and proposes a scheme of ultra-long haul transmission based on 1550nm optical fiber. Good economic and social benefits have been achieved in operation.

[109] Microblog Public Opinion Supervision System Based on Sentiment Analysis

Microblog is an important new media source of network public opinion and deeply influences the generation and evolution of public opinion. It is significant for the supervision department to improve the construction of microblog public opinion supervision system, so that accurate prediction, early warning, scientific and effective prevention could be achieved against all kinds of prominent network risks. This paper introduces a microblog public opinion supervision system based on both searching technology and sentiment analysis, which is designed by Hainan Broadcasting Internet Monitoring and Supervision Center, for your reference.