

卷首语

1 努力提升人居声环境品质

吴硕贤

专稿

6 新型镍氧超导体的理论研究

姚道新

专题：噪声污染防治

14 完善中国宁静区域创建制度的研究

魏新渝,赵桂英,王尔奇,严紫薇,

毛玉如,彭立新

23 中国噪声自动监测的现状和发展

毛玉如,汪贇,张建勋

32 声学材料研究进展及其在工业噪声 污染治理中的应用

冯涛,尤炫惠,汪婕,王晶

48 基于综合优化方法的电力设备动力吸 振技术研究

耿明昕,马建刚,白晓春,孙强,申晨,魏新渝

55 中国建筑施工噪声污染防治对策

郭弘,魏巍

60 中国高速铁路噪声控制研究进展

刘兰华,李志强,周铁军,伍向阳

70 城市轨道交通噪声污染防治进展

户文成,刘磊,康钟绪,宋瑞祥,张慧娟,刘强

85 道路交通噪声控制技术研发进展

袁昱恣,王彦琴,邵社刚,李明亮

95 道路交通噪声预测中单车噪声模型 研究

张丽娟,汪婕,杨洁,王蓓蓓,赵桂英

103 机场周围区域航空器噪声控制国际 比较及经验借鉴

汪贇,魏新渝,吴晓燕,赵桂英

110 噪声地图技术在噪声污染防治监管中 的发展和应用

刘磊,户文成,赵彬彬,樊晓剑

Foreword

- 1 Improve the quality of the acoustical environment for human habitation *WU Shuoxian*

Special to S&T Review

- 6 Theoretical study of $\text{La}_3\text{Ni}_2\text{O}_7$ and $\text{La}_4\text{Ni}_3\text{O}_{10}$ *YAO Daoxin*

Exclusive: Noise pollution prevention and control

- 14 Research on perfecting the system of establishing quiet areas in China *WEI Xinyu, ZHAO Guiying, WANG Erqi, YAN Ziwei, MAO Yuru, PENG Lixin*
- 23 The current situation and development of noise automatic monitoring in China *MAO Yuru, WANG Yun, ZHANG Jianxun*
- 32 Research progress of acoustic materials and the application in industrial noise pollution control *FENG Tao, YOU Xuanhui, WANG Jie, WANG Jing*
- 48 Research on dynamic vibration absorption technology of power equipment based on comprehensive optimization method *GENG Mingxin, MA Jiangang, BAI Xiaochun, SUN Qiang, SHEN Chen, WEI Xinyu*

- 55 Study on the prevention and control measures of construction noise pollution in China *GUO Hong, WEI Wei*
- 60 Research and prospect on noise control of high speed railways in China *LIU Lanhua, LI Zhiqiang, ZHOU Tiejun, WU Xiangyang*
- 70 Progress on prevention and control of urban rail transit noise pollution *HU Wencheng, LIU Lei, KANG Zhongxu, SONG Ruixiang, ZHANG Huijuan, LIU Qiang*
- 85 Current status and development trends of road traffic noise control technology *YUAN Minmin, WANG Yanqin, SHAO Shegang, LI Mingliang*
- 95 Research on the single-vehicle noise model in road traffic noise prediction *ZHANG Lijuan, WANG Jie, YANG Jie, WANG Beibei, ZHAO Guiying*
- 103 International comparison and experience of aircraft noise control around airports *WANG Yun, WEI Xinyu, WU Xiaoyan, ZHAO Guiying*
- 110 The development and application of noise mapping technology in the control and supervision of noise pollution *LIU Lei, HU Wencheng, ZHAO Shanshan, FAN Xiaojian*