

# 内燃机学报

第 43 卷 第 2 期 ( 总 218 期 ) 2025 年

## 目 次

- 43-012 基于浓度与活性分层的汽油小负荷压燃研究  
.....张 蕾, 张珊珊, 邬斌扬, 苏万华 ( 97 )
- 43-013 高压-微孔条件下不同黏度重质燃料油的喷雾与着火特性  
.....路秀伟, 魏立江, 黄文庆 ( 107 )
- 43-014 微量柴油引燃高压直喷天然气的碳烟体积分数分布  
.....夏天峰, 陶文辉, 王晓艳, 樊 旭, 王定文, 董 全 ( 117 )
- 43-015 两级增压米勒循环柴油机的热力学性能及焓分析  
.....王 毅, 何冠璋, 林铁坚, 黄豪中, 郭晓宇, 邢孔钊 ( 127 )
- 43-016 高原地区混合动力汽车污染物排放特性与燃油经济性  
.....姚杨雨, 李加强, 赵龙庆, 何 超 ( 136 )
- 43-017 SCR 尿素沉积物催化分解机理与动力学模型研究  
.....夏 冲, 朱元清, 周 松, 冯永明 ( 144 )
- 43-018 柴油机双喷系统前级 SCR 的光学诊断  
.....魏 锋, 王井山, 杨海龙, 苏菲菲, 孙彦斌, 贾德民 ( 153 )
- 43-019 高温高压下柴油密度的变化  
.....陈 萍, 徐荣武, 刘振明, 刘景斌, 李丽婷, 李 梅 ( 158 )
- 43-020 基于超声波的涂层活塞环油膜厚度仿真  
.....罗佳美, 韩晓光, 单英春, 王静思, 徐久军 ( 164 )
- 43-021 增压器离心压气机多部件多目标耦合优化  
.....王 睿, 刘正先, 李孝检, 刘 焯 ( 173 )
- 43-022 基于自适应特征提取的柴油机传动系振动识别  
.....周启迪, 王延荣, 李志鹏, 许春光, 张忠伟, 刘玉婷 ( 183 )

# Chinese Society for Internal Combustion Engines

## TRANSACTIONS OF CSICE

Vol.43 No.2 (Sum 218) 2025

---

### CONTENTS

- 43-012** A study of gasoline compression ignition at low load based on concentration and activity stratification  
.....Zhang Lei, Zhang Shanshan, Wu Binyang, Su Wanhua ( 97 )
- 43-013** Spray and ignition characteristics of HFO with different viscosities under high pressure and micro hole conditions.....Lu Xiuwei, Wei Lijiang, Huang Wenqing ( 107 )
- 43-014** Distribution of soot volume fraction of high pressure direct injection natural gas ignited by trace diesel  
.....Xia Tianfeng, Tao Wenhui, Wang Xiaoyan, Fan Xu, Wang Dingwen, Dong Quan ( 117 )
- 43-015** Thermodynamic performance and exergy analysis of a two-stage turbocharged Miller-cycle diesel engine  
.....Wang Yi, He Guanzhang, Lin Tiejian, Huang Haozhong, Guo Xiaoyu, Xing Kongzhao ( 127 )
- 43-016** Pollutant emission and fuel economy of hybrid electric vehicles in plateau regions  
.....Yao Yangyu, Li Jiaqiang, Zhao Longqing, He Chao ( 136 )
- 43-017** Investigation on catalytic decomposition mechanism and kinetic model of SCR urea deposits  
.....Xia Chong, Zhu Yuanqing, Zhou Song, Feng Yongming ( 144 )
- 43-018** Optical diagnostic on close-coupled SCR of diesel engine dual-injection system  
.....Wei Feng, Wang Jingshan, Yang Hailong, Su Feifei, Sun Yanbin, Jia Demin ( 153 )
- 43-019** Variation of diesel density at high temperature and high pressure  
.....Chen Ping, Xu Rongwu, Liu Zhenming, Liu Jingbin, Li Liting, Li Mei ( 158 )
- 43-020** Simulation of oil film thickness of coated piston ring based on ultrasonic  
.....Luo Jiamei, Han Xiaoguang, Shan Yingchun, Wang Jingsi, Xu Jiujun ( 164 )
- 43-021** Multi-component and multi-objective coupling optimization of turbocharger centrifugal compressor  
.....Wang Rui, Liu Zhengxian, Li Xiaojian, Liu Ye ( 173 )
- 43-022** Vibration identification of diesel engine transmission system based on adaptive feature extraction  
.....Zhou Qidi, Wang Yanrong, Li Zhipeng, Xu Chunguang, Zhang Zhongwei, Liu Yuting ( 183 )