

# 工程热物理论文集

高等学校工程热物理第二届全国学术会议

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教育部高等学校工程热物理学科协调组编

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## 内 容 简 介

1986年10月在武汉召开的“高等学校工程热物理第二届全国学术会议”征集了全国高等学校和一些科研单位的论文286篇。本文集收编了经过严格评审后录用的且在会议期间宣读的所有论文共110篇，它在一定程度上反映了近三年来我国高等学校在工程热物理学领域中开展科学的研究的动向和已取得的某些主要成果。

该文集共分五部分：第一部分工程热力学(22篇)，第二部分传热传质学(45篇)，第三部分燃烧学(16篇)，第四部分热流体力学(17篇)，第五部分热物理量测(10篇)。

本文集可供从事工程热物理及有关研究的科技人员、高等院校师生(包括研究生)参考。

## 工程热物理论文集

教育部高等学校

工程热物理学科协调组 编

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# 序

本文集收编了 1986 年 10 月 27 日至 30 日在武汉召开的高等学校工程热物理第二届全国学术会议期间实际宣读的所有论文,共 110 篇,其中工程热力学 22 篇,传热传质学 45 篇,燃烧学 16 篇,热流体力学 17 篇,热物理量测 10 篇。这些论文是从会前八个月征集到的 286 篇论文中,经过严格评审后录用的。这本文集在一定程度上反映了“六·五”期间后三年(即 1983 年 9 月 28 日至 10 月 3 日在南京举行首届会议之后三年)内我国高等学校在工程热物理学科领域中开展科学的研究的动向和已取得的某些主要成果。

高等学校肩负着为我国社会主义四个现代化建设事业培养高质量科学技术人才的重任,包括立足于国内扩大培养优秀的硕士生和博士生。形势的发展要求高等学校在三个“面向”的指引下,不单是教学中心,有条件的还应努力开创既是教学中心、又是科研中心的新局面,使高等学校确实成为我国科学的一个重要方面军,在科研实践中出成果、出人才。本文集就已包含有“六·五”期间在培养博士生和硕士生过程中的部分成果。

和上届会议文集(清华大学出版社,1985)相对照,不难看出,通过研究生的培养,已明显提高了本文集中传热传质学文章的比例,占了 110 篇的 41%,比上次文集中所占比例 31% 相对增长了 36%。这几年,工程热物理的作用与地位已在我国各界得到更多的确认,将它列作新兴技术科学的重要一环。工程热物理的研究范围也开始超越传统的能源科学技术领域而向材料科学、信息科学、环境科学、生物技术等领域渗透,国际上正在衍生出诸如材料热科学、环境热物理、生物热物理等一些新的边缘分支学科,这种趋向在本文集中亦多少有所反映。

原教育部直属高校工程热物理学科协调组在国家教委科技司的支持下编印出版这本文集的意图,不仅仅在于记录在卷以有利于学术上切磋,还寄予深切的期望,促使我们在新的起点更上一层楼!对于论文作者和文集编者——华中工学院的程尚模、王崇琦、黄素逸、杨金宝等同志以及科学出版社对本文集的问世所给予的种种协作,谨志此一并致谢。

王补宣

1986 年 12 月 26 日于北京

# 目 录

## 第一部分 工程热力学

- II-861001 热电联产节能效益的评价.....李 眚 王加璇 宋之平 (3 )  
II-861002 整体煤气化/燃气-蒸汽联合循环的热力学模型研究.....刘 民 刘英哲 (9 )  
II-861003 加装暖风器的 12.5 万千瓦汽轮机热力系统的优化设计.....章以强 (15 )  
II-861004 用改良的 Redlich-Kwong 方程计算饱和性质.....何志迈 王怀信 张于峰 (23 )  
II-861005 氢能双工质燃气轮机循环.....俞颐秦 (29 )  
II-861006 混合工质在开发低焓能源中的研究与实验.....吕灿仁 马一太 严晋跃 (37 )  
II-861007 热泵系统的熵分析和热经济学分析.....蔡祥兴 杨东华 (45 )  
II-861008 非平衡场中熵源强度的分布及最小熵产原理的应用.....曾丹苓 (51 )  
II-861009 降速干燥阶段，毛细多孔体湿含量与其中水液面蒸汽分压间关系  
的探讨.....葛士福 范 铭 王荣年 (59 )  
II-861010 实际流体热力过程计算公式表.....谭连城 (65 )  
II-861011 实际稳流工质焓熵的两参数通用计算图.....  
.....朱明善 邓小雪 赵国昌 (73 )  
II-861012 换热器中的熵产分析.....过增元 严鸿飞 (79 )  
II-861013 有色金属冶炼炉的能量平衡和熵平衡对比.....龙敏贤 (85 )  
II-861014 工质与低温热源工作温度的有限时间热力学分析.....  
.....孙丰瑞 赖锡棉 (91 )  
II-861015 变温热源的理想循环及非共沸混合工质在动力循环中的应用.....  
.....严晋跃 马一太 吕灿仁 (97 )  
II-861016 异丁烷熵焓图及不同  $T_0$  时的修正方法.....  
.....杜建华 赵国昌 徐应清 邓小雪 朱明善 (103 )  
II-861017 热电联产最佳经济效益的分析研究.....崔树庆 武学素 (109 )  
II-861018 熵方程一般形式的探讨.....金六一 (115 )  
II-861019 西藏中低温地热双循环发电的技术经济分析.....  
.....胡亮光 王之安 李汉炎 吕灿仁 (121 )  
II-861020 燃气轮机装置热力计算的简化方法.....尚德敏 严家骏 (129 )  
II-861021 EOS 法计算混合工质的汽液平衡.....童景山 高光华 (137 )  
II-861022 铸铁拉伸过程中的热现象.....江光佐 (143 )

## 第二部分 传热传质学

- II-862023 圆壳式半导体器件管壳热状态的分析.....黄晓齐 (151 )

II-862024	椭圆石英柱体内三元合金锭凝固过程的传热分析与数值计算.....	殷晓静 俞昌铭 (157)
II-862025	导热方程等价泛函推导的经典变分方法.....	钱壬章 陈维汉 (163)
II-862026	移动热源导热的非准稳态精确解.....	张洪济 (171)
II-862027	薄层材料导热系数测定的研究.....	陆怡生 姚扬猷 (179)
II-862028	利用激光脉冲技术研究我国煤种资源的热学性质.....	顾毓沁 程从明 周以静 吴雅珏 李磊 (185)
II-862029	隔热复合壁非稳态温度场的拟稳态叠加求解法.....	李培清 (191)
II-862030	9 MPa、300℃以下地下岩层导热系数的测定.....	李芝兰 李冬青 李江安 葛新石 (197)
II-862031	双试样保护热板 1400K 高温导热仪的研制 .....	过晓宇 李晶 蒋汉文 (203)
II-862032	测量非金属材料导热系数的瞬态热片方法.....	徐益峰 王兴安 (207)
II-862033	竖平板通道自然对流和辐射换热的理论与实验研究.....	过增元 桂业伟 李志信 (213)
II-862034	用 M-Z 干涉法研究平行平板间单列水平椭圆管的自然对流放热	魏秉武 杨金宝 赵永湘 (221)
II-862035	偏心水平圆柱环形空间自然对流传热的数值研究.....	孙仁洽 张兴 (227)
II-862036	双半圆大电流封闭母线自然对流换热实验研究.....	王国祥 吴清金 王启杰 (235)
II-862037	三角形斜波纹流道内三维流的流阻、流型可视化和换热的研究...	罗棣菴 张黎 焦芝林 顾传保 (241)
II-862038	横掠椭圆矩形翅片管束的放热,.....	黄素逸 杨金宝 (249)
II-862039	双排大套片管束的排列对肋片换热的影响.....	田野 陈钟颐 陶文铨 (253)
II-862040	涡轮导叶前缘腔换热实验研究.....	邱绪光 柏林 曹玉璋 康滢 关雷洋 (261)
II-862041	沿恒热流水平板层流混合对流的研究.....	史胜熙 刘明杰 (269)
II-862042	机械加工表面多孔管抗垢性能的研究.....	郑康民 邓颂九 (277)
II-862043	非均匀浓度蒸汽-不凝性气体物系膜状凝结放热模型的理论解 ...	魏保太 乔跃明 (285)
II-862044	过冷液体高速流过管内时的湍流膜沸腾传热研究.....	王补宣 彭晓峰 (291)
II-862045	高光洁度表面上珠状凝结的机理分析及传热计算.....	叶粮 辛明道 (297)
II-862046	机械加工多孔表面几何结构对沸腾换热性能的影响.....	齐鸣 蔡义汉 齐金生 (303)
II-862047	垂直管内水蒸汽凝结放热的试验研究.....	

.....	马义伟 孙成辉 冯毅 尚希禹	(313)
II-862048 对称物面冷凝传热准则方程	王进修 姚爱如 程尚模	(319)
II-862049 饱和核沸腾活化腔稳定性判据分析	李友荣 辛明道	(327)
II-862050 水在低流速下流过周向不均匀受热圆管时的过冷沸腾	林玲 阜宁	(333)
.....		
II-862051 活性气化核心密度与加热面沸腾特性的定量相关式	杨善让 R.H.Kim	(339)
.....		
II-862052 液滴在平板上蒸发时的不稳定性	张能力 王补宣 徐友仁	(345)
II-862053 水平单管在流化床自由空间的传热	.....	
.....	郭宏生 徐益谦 陆勇 姚伟文	(351)
II-862054 气-固流化床层与壁面的传热	吕青 王荣年	(359)
II-862055 用涂层法测定煤粉黑度及其修正	陈维汉 钱壬章	(365)
II-862056 圆管玻璃蜂窝太阳辐射透过率的数值计算	.....	
.....	张平 张诗针 沈珞婵	(371)
II-862057 同心套管式辐射换热器的数值计算分析	郭东风 卞伯绘	(377)
II-862058 大粒子表面黑度的实验研究	余其铮 邓作波	(383)
II-862059 泰氟隆管束换热设备模型实验及换热网络优化计算	.....	
.....	欧阳岳华 裴觉民 李淞平 林纪方	(389)
II-862060 电站空冷系统最佳初始温差	傅秦生 刘咸定	(399)
II-862061 平板肋片式逆交叉流换热器瞬态特性的研究	.....	
.....	唐志泊 陈德雄 朱学欧	(405)
II-862062 强化传热性能评价的一种新方法	张永涛 周强泰	(411)
II-862063 半导体温差电致冷温度响应及实验研究	.....	
.....	孟繁炯 马鸿斌 潘延龄	(417)
II-862064 稀薄电离气体向金属圆柱体的传热	陈熙 陈小明	(425)
II-862065 冷却和复温过程中肢体的热量传递	徐云生 钱壬章 黄文迪	(431)
II-862066 第三类边界条件下测定含湿多孔介质质扩散系数的等温法	.....	
.....	王补宣 虞维平	(439)
II-862067 冷冻干燥过程中传热传质研究	姚爱如 王进修 程尚模	(445)

### 第三部分 燃烧学

II-863068 增压流化床颗粒扬析的试验研究	.....	
.....	金保升 刘前鑫 唐楚明 邱东明 范从振	(455)
II-863069 激光全息术在柴油机喷雾特性测量研究中的应用	.....	
.....	何万祥 李志雄	(461)
II-863070 几种不同性质喷气燃料的高空低压点火性能研究	.....	
.....	陈能坤	(473)
II-863071 燃烧器出口流场的计算和绘图的通用程序	.....	
.....	韩才元 潘祖明 王红 吴吕斌	(481)
II-863072 煤粉气流火炬点火的试验研究	.....	

- .....朱皑强 蒋持志 袁友生 王志斌 (489)
- II-863073 自燃推进剂液滴在惰性高温环境中的分解燃烧.....胡小平 钟良生 庄逢辰 (497)
- II-863074 燃油在火焰稳定器壁面蒸发的试验研究.....刘志刚 王家骅 吴革新 (503)
- II-863075 煤粒在工业沸腾炉内横向扩散的研究.....项黔 岑可法 黄国权 陶涛 (511)
- II-863076 旋流燃烧的实验研究和数值计算.....刘伟 严传俊 王宏基 朱慧龄 唐明 吴二平 陈炳录 (517)
- II-863077 煤粉两相流燃烧的拉氏-欧拉颗粒群模型 .....周力行 (527)
- II-863078 粉煤挥发份快速析出规律的实验研究.....韩洪樵 傅维标 王涤非 张燕屏 (533)
- II-863079 关于煤水浆点火与稳定燃烧的研究.....逯高清 任世铮 (539)
- II-863080 带周界风的钝体燃烧器冷态空气动力特性的试验研究.....米建春 曾汉才 (545)
- II-863081 燃油锅炉改烧水煤浆的工业试验.....谢名湖 吕德寿 张铁均 岑可法 曹欣玉 黄镇宇 (557)
- II-863082 间歇式燃料加热炉性能分析的一种准定常方法.....王存诚 (565)
- II-863083 高温气流中燃油液雾的特性和液雾蒸发历史相互关系的研究.....朱俊勇 金如山 (571)

#### 第四部分 热流体力学

- II-864084 气膜冷却流场的实验研究.....刘德彰 郑际睿 吉洪湖 (585)
- II-864085 主流叶片气动有限元计算及试验研究.....张志刚 朱鸿 (597)
- II-864086 气-固两相流动引起固体火箭发动机比冲量损失的分析研究 .....王南炎 (603)
- II-864087 对湍流时均涡量输运方程的改进.....李有章 农灿 (609)
- II-864088 模型燃烧室中三元旋转流场的实验研究.....唐明 朱慧龄 严传俊 吴二平 陈炳录 (615)
- II-864089 双叶节机翼形可调叶片扩压器的试验研究.....徐雕 刘光宗 (621)
- II-864090 轴流压气机栅后尾迹的试验研究.....王裕宗 刘建华 时静珣 (627)
- II-864091 涡轮叶片前腔流动模拟实验研究.....康滢 邱绪光 关雷洋 (639)
- II-864092 热力涡轮机械叶栅分离流动计算.....蒋滋康 周耀柒 (645)
- II-864093 各参数对并联管组流动特性的影响.....余佩桢 王兴安 (653)
- II-864094 在计算具有分流叶片流场中确定分流比的方法.....石道中 王建华 (663)
- II-864095 圆弧形斜流叶轮的准三元设计法与翼形斜流叶轮的比较.....吴克启 蔡兆林 区颖达 (669)
- II-864096 气液两相环状流形成的研究.....陈宣政 陈听宽 (675)
- II-864097 煤粉颗粒群在脉动气流中运动时阻力系数的数值计算.....

.....	樊建人 岑可法 (683)
II-864098 垂直环形管中气-液两相流空泡份额的计算与实验研究 .....	邱东明 贾斗南 (691)
II-864099 热尾流浮升效应的实验研究和能量分析.....	杜先之 陈伯义 华顺芳 (699)
II-864100 悬浮体管道输送中粉尘热沉积.....	蔡嵩 金仁奎 (707)

## 第五部分 热物理量测

II-865101 三探针法诊断射频低压等离子体的电子温度.....	朱文浩 王炯 陈跃山 (715)
II-865102 动态液膜厚度测试装置及其应用.....	古大田 朱家骅 (721)
II-865103 消光法测量装置的研制与校核.....	施红辉 徐廷相 蔡颐年 (729)
II-865104 用双激光全息干涉法同时测量温度场和浓度场的若干问题.....	黄素逸 (735)
II-865105 水冷、音速高温计.....	赵承龙 (741)
II-865106 一种直接测量物体真温的辐射测温方法.....	孙仁洽 俞伦鹏 (747)
II-865107 流量智能信息处理器研究.....	史绍熙 王仕康 周景生 郭晓明 (753)
II-865108 肋片换热的全息干涉法测量.....	夏吉良 辛明道 王进 (759)
II-865109 热偶扫描法测量高温气流温度分布.....	樊友三 金文炽 崔筱敏 贺勇 (765)
II-865110 可用于测量大攻角气体流动的七孔探针的校准.....	余大江 唐明 严传俊 王宏基 吴二平 (771)

# CONTENTS

## Part 1. ENGINEERING THERMODYNAMICS

- II-861001 Evaluation of Saving Energy for Heat-Electric Cogeneration .....  
..... *Li Ye Wang Jiaxuan Song Zhiping* (Beijing  
Graduate School The North China Institute of Electric Power) ( 3 )
- II-861002 Thermodynamic Modelling of the Integrated Gasification Combined  
Cycle ..... *Liu Min Liu Yingzhe* (Xi'an Jiaotong University) ( 9 )
- II-861003 The Optimal Design of the Thermosystem for 125 MW Steam  
Turbine with the Air Preheater .....  
..... *Zhang Yiqiang* (Shanxi Institute of Mechanical Engineering) ( 15 )
- II-861004 The Evaluation of Saturated Properties with the Modified Redlich-  
Kwong Equation of State .....  
..... *He Zhimai Wang Huaxin Zhang Yufeng* (Tianjin University) ( 23 )
- II-861005 Hydrogen Energy Dual Fluid Gas Turbine Cycle .....  
..... *Yu Yiqin* (Hebei Institute of Technology) ( 29 )
- II-861006 Study and Experiment of Refrigerant Mixtures in Exploiting Low  
Enthalpy Energy Sources .....  
..... *Lü Canren Ma Yitai Yan Jinyue* (Tianjin University) ( 37 )
- II-861007 Exergetic and Thermo economical Analyses of Heat Pump System  
..... *Cai Xiangxing Yang Donghua* (East China Institute of Chemical Technology) ( 45 )
- II-861008 Distribution of the strength of Entropy Sources in Non-equilibrium  
Fields and the Applications of the Principle of Minimum Entropy  
Production ..... *Zeng Danling* (Chongqing University) ( 51 )
- II-861009 The Study of the Relation between the Moisture Content and the  
Vapour Pressure inside the Porous Capillary Material in the Falling  
Rate Period of Drying ..... *Ge Shifu Fan Ming Wang Rongnien* (Nanjing Institute of Technology) ( 59 )
- II-861010 A Table of Generalized Expressions for the Calculation of The-  
rmodynamic Processes of Fluid .....  
..... *Tan Liancheng* (Xi'an Jiaotong University) ( 65 )
- II-861011 A Generalized Two-parameter Diagram of Real Working Fluids  
for Steady Flow ..... *Zhu Mingshan Deng Xiaoxue Zhao Guochang* (Tsinghua University) ( 73 )

- II-861012 Entropy Generation Analysis in Heat Exchangers .....  
..... *Guo Zengyuan Yan Hongfei* (Tsinghua University) ( 79 )
- II-861013 The Comparison of the Exergy Balance and Energy Balance for  
the Tin-smelting Burnace .....  
..... *Long Minxian* (South China Institute of Technology) ( 85 )
- II-861014 Finite Time Thermodynamics Analysis of Operating Temperature  
of Working Fluid and Cold Reservoir.....  
..... *Sun Fengrui Lai Ximian* (Naval Academy of Engineering) ( 91 )
- II-861015 The Ideal Cycle for Temperature-variable Heat Sources and the  
Application of Non-azeotropic Mixture In Power Cycle .....  
..... *Yan Jinyue Ma Yitai Lü Canren* (Tianjin University) ( 97 )
- II-861016 The Exergy-Enthalpy Diagram for Isobutane and the Modification  
Method at Different Environmental Temperature *Du Jianhua Zhao*  
..... *Guochang*  
..... *Xu Yingqing Deng Xiaoxue Zhu Mingshan* (Tsinghua University) (103)
- II-861017 The Research of Optimal Economic Benefit in Cogeneration .....  
..... *Cui Shuqing Wu Xuesu* (Xi'an Jiaotong University) (109)
- II-861018 Study on the General Form of Entropy Equation .....  
..... *Jin Liuyi* (Huazhong University of Science and Technology) (115)
- II-861019 Feasibility Study of Binary Cycle Power Production for Low to  
Moderate Temperature Geothermal Resources in Tibet...*Hu Liang-*  
*guang Wang Zhian Li Hanyan Lü Canren* (Tianjin University) (121)
- II-861020 A Simplifying Method for the Thermodynamic Calculations of Gas-  
Turbine-Installation.....  
..... *Shang Demin Yan Jialu* (Harbin Institute of Technology) (129)
- II-861021 Predicting Vapor-Liquid Equilibria of Mixing Working Substances  
by EOS...*Tong Jingshan Gao Guanghua* (Tsinghua University) (137)
- II-861022 Thermal Phenomena in Elongating Specimen of Cast Iron.....  
..... *Jiang Guangzuo* (Southwestern Jiaotong University) (143)

## Part 2. HEAT AND MASS TRANSFER

- II-862023 The heat Situation Analysis of the Circular Case of Semiconductor  
Device.....*Huang Xiaoqi*(Guizhou Institute of Technology) (151)
- II-862024 Heat Transfer Analysis and Numerical Calculation During Solidifi-  
cation Process of  $Cd_xHg_{1-x}Te$  Alloy Ingot with Oval Cross Section  
in Quartz Mold.....*Yin Xiaojing*  
*Yu Changming* (Beijing University of Iron and Steel Technology) (157)
- II-862025 Deducing Equivalent Functional of Heat Conduction Equation by  
Classical Variational Method.....*Qian Renzhang*

- Chen Weihan (Huazhong University of Science and Technology) (163)
- II-862026 The Unquasi-Stationary Exact Solution of Heat Conduction due to Moving Sources.....Zhang Hongji (Chongqing University) (171)
- II-862027 The Research for Measuring Thermal Conductivity of Thin Layer Material .....Lu Yisheng Yao Yaungyou (Nanjing Institute of Technology) (179)
- II-862028 Research on the Thermal Properties of the Coal Natural Resources of China by the Laser Pulse Technique.....Gu Yuqin Cheng Congming Zhou Yijing Wu Yajue Li Lei (Tsinghua University) (185)
- II-862029 Quasi-Steady Superposition Method for Solving the Theoretical Temperature Field of a Heat-Insulated Composition Wall .....Li Peiqing (Changsha Railway Institute) (191)
- II-862030 Measurement of Thermal Conductivity of Underground Rock Formation up to 9 MPa and 573K.....Li Zhilan Li Dongqing Li Jiangan Ge Xinshi (University of Science and Technology of China) (197)
- II-862031 The Study of Two Specimens Guarded Hot Plate (1400K) Heat Transmission Apparatus.....Guo Xiaoyu Li Jing Jiang Hanwen (Tongji University) (203)
- II-862032 Transient Hot-Chip Method for Measuring the Thermal Conductivity of Non-metal Material.....Xu Yifeng Wang Xingan (Shanghai Institute of Mechanical Engineering) (207)
- II-862033 Theoretical and Experimental Research of Natural Convection and Radiation Heat Transfer in Flat Plate Channel.....Guo Zenyuan Gui Yewei Li Zhixin (Tsinghua University) (213)
- II-862034 The Study of Free Convection Heat Transfer From a Horizontal Elliptic Cylinders in Array Between Parallel Plates by Means of M-Z Interferometry .....Wei Bingwu Yang Jinbao Zhao Yongxiang (Huazhong University of Science and Technology) (221)
- II-862035 Numerical Study of Natural Convection Heat Transfer in Eccentric Horizontal Cylindrical Annuli.....Sun Renqia (Nanjing Institute of Technology) Zhang Xing (Tsinghua University) (227)
- II-862036 The Experimental Study for Natural Convection in Double Half-Cylinder Enclosed Bus.....Wang Guoxiang Wu Qingjin Wang Qijie (Xi'an Jiaotong University) (235)
- II-862037 Pressure Drop, Flow Visualization and Heat Transfer of Three Dimensional Flow in an Inclining Triangular Corrugated Duct .....Luo Di'an Zhang Li Jiao Zhilin Gu Chuangbao (Tsinghua University) (241)
- II-862038 Heat Transfer in Forced Convection Finned Elliptical Tube Banks

- .....*Huang Suyi*
- Yang Jinbao* (Huazhong University of Science and Technology) (249)
- II-862039 Effect of Tube Arrangement on the Heat Transfer of a Two-Row  
Plate-fin and Tube Heat Exchanger.....*Tian Ye*  
*Chen Zhongqi Tao Wenquan* (Xi'an Jiaotong University) (253)
- II-862040 An Experimental Investigation of Heat Transfer of the Internal  
Cooling Structure at leading Edge Plenum of a Turbine Vane ...  
.....*Qiu Xuguang Bai Lin Chao Yuzhang Kang Yin*  
*Guan Leiyang* (Beijing Institute of Aeronautics and Astronautics) (261)
- II-862041 A Study of the Laminar Mixed Convection along a Horizontal Flat  
Plate with Uniform Heat Flux.....  
.....*Shi Shengxi Liu Mingjie* (Nanjing Institute of Technology) (269)
- II-862042 Investigation of Fouling and Fouling-resistance on Porous Surface  
Tube During Pool Boiling of Inorganic Salt Solution.....*Zhen*  
*Kangmin Deng Songjiu* (South China Institute of Technology) (277)
- II-862043 Analytical Research on Condensation Heat Transfer of a Vapor  
in the Presence of Nonhomogeneous Noncondensable Gas Concen  
tration.....*Wei Baotai Qiao Yueming* (Tianjin University) (285)
- II-862044 Study of the Turbulent Flow Film Boiling for Subcooled Liquid  
in a Circular Tube .....
- .....*Wang Buxuan Peng Xiaofeng* (Tsinghua University) (291)
- II-862045 The Heat Transfer Mechanism and Analysis of Dropwise Condens  
ation on the high Smooth Finish Surfaces .....
- .....*Yie Liang Xin Mingdao* (Chongqing University) (297)
- II-862046 Effect of Geometric Structure on Performance of Boiling Heat Tran  
sfer from Porous Surface .....
- .....*Qi Ming Cai Yihan Qi Jinsheng* (Tianjin University) (303)
- II-862047 Experimental Study on the Condensing Heat Transfer of Steam  
Inside a Vertical Tube.....*Ma Yiwei Sun Chenghui*  
*Feng Yi Shang Xiyu* (Harbin Institute of Technology) (313)
- II-862048 The Investigation of the Vapor Condensation Heat Transfer  
Over the Axisymmetric Surface.....*Wang Jinxiou Yao Airu*  
*Cheng Shangmo* (Huazhong University of Science and Technology) (319)
- II-862049 Analysis of the Stability Criterion for Active Cavities in Saturated  
Nucleate Boiling .....
- .....*Li Yourong Xin Mingdao* (Chongqing University) (327)
- II-862050 The Subcooled Boiling for Water with Low Mass Velocity Flowing  
in a non-uniform Circumferential Heated Tube.....*Lin Ling*  
*Zhuo Ning* (Shanghai Institute of Mechanical Engineering) (333)

- II-862051 Dependence of Active Nucleation Site Density on Heating Surface Boiling Characteristics .....  
*Yang Shanrang* (Northeast China Institute of Electric Power Engineering) *R. H. Kim* (University of North Carolina at Charlotte) (339)
- II-862052 Instability of Liquid Droplets Evaporating on a Flat Plate.....  
.....  
*Zhang Nengli Wang Buxuan* (Tsinghua University)  
*Xu Youren* (East China Technical University of Water Resources) (345)
- II-862053 Heat Transfer of Single Horizontal Tube in Freeboard of Fluidized Bed.....  
*Guo Hongsheng* (Xi'an Jiaotong University) *Xu Yiqian Lu Yong Yao Weiwen* (Nanjing Institute of Technology) (351)
- II-862054 Heat Transfer between Gas-solid Fluidized Bed and Its Surface .....  
.....  
*Lu Qing Wang Rongnian* (Nanjing Institute of Technology) (359)
- II-862055 The Measurement of Pulverized Coal Thermal Emissivity by the Coating Method and Its Correction.....  
.....  
*Chen Weihan Qian Renzhang* (Huazhong University of Science and Technology) (365)
- II-862056 Numerical Computation of Solar Transmittance of Cylindrical Glass Honeycombs .....  
.....  
*Zhang Ping Zhang Shizhen Shen Luochan* (Zhejiang University) (371)
- II-862057 Numerical Analysis of Annular Heat Exchangers.....  
.....  
*Guo Dongfeng Bian Bouhui* (Tsinghua University) (377)
- II-862058 The Experimental Study for Surface Emissivity of Large Particles .....  
.....  
*Yu Qizheng Deng Zuobo* (Harbin Institute of Technology) (383)
- II-862059 Heat Transfer Experiments on Teflon Tube Bundle Heat Exchanger Model and Computations of the Optimal Heat Transfer Network .....  
.....  
*Ouyang Yuehua Pei Juemin Li Songping Lin Jifang* (Dalian Institute of Technology) (389)
- II-862060 The Optimal Initial Temperature Difference of Power Plant with Dry Cooling Tower.....  
.....  
*Fu Qinsheng Liu Xianding* (Xi'an Jiaotong University) (399)
- II-862061 The Research of the Transient Behavior of Plate-Fin Counter-cross-Flow Heat Exchangers.....  
.....  
*Tang Zhipo Chen Dexiong Zhu Xueou* (Nanjing Aeronautic Institute) (405)
- II-862062 A New Performance Evaluation method on Enhanced Heat Transfer.....  
.....  
*Zhang Yongtao* (Jiangsu Institute of Technology) *Zhou Qiangtai* (Nanjing Institute of Technology) (411)
- II-862063 Transient Analysis and Experimental Investigation of Thermoelectricity Refrigeration .....  
.....  
*Meng Fanjiong Ma Hongbin Pan Yanling* (Dalian Marine College) (417)
- II-862064 Heat Transfer to a Metallic Cylinder Immersed in a Rarefied Ion-

- ized-Gas..... *Chen Xi Chen Xiaoming* (Tsinghua University) (425)
- II-862065 Heat Transfer in Human Forearms During Cooling and Rewarming..... *Xu Yunsheng Qian Renzhang Huang Wendi* (Huazhong University of Science and Technology) (431)
- II-862066 An Isothermal Method for Determining the Mass Diffusivity of Moist Porous Media with the Third Boundary Condition..... *Wang Buxuan Yu Weiping* (Tsinghua University) (439)
- II-862067 On the Heat and Mass Transfer of Freeze-Drying Process..... *Yao Airu Wang Jinxiou Cheng Shangmo* (Huazhong University of Science and Technology) (445)

### Part 3. COMBUSTION

- II-863068 Experimental Investigation of Elutriation in a Pressurized Fluidized Bed..... *Jin Baosheng Liu Qianxing Tang Chuming Qiu Dongming Fan Congzhen* (Nanjing Institute of Technology) (455)
- II-863069 Application of Holography in the Distribution Measurement of Fuel Spraying Field in Diesel Engines..... *He Wanxiang Li Zhixiong* (Tianjin University) (461)
- II-863070 Investigation of High-Altitude Low Pressure Ignition Performance of Several Jet Fuels with Different Properties..... *Chen Nengkuen* (Beijing Institute of Aeronautics and Astronautics) (473)
- II-863071 The General Program for the Calculating and Plotting of the Flow Field from the Burner..... *Han Caiyuan Pan Zuming Wang Hong Wu Lübin* (Huazhong University of Science and Technology) (481)
- II-863072 Experimental Investigation on Ignition of Pulverized Coal-Air Flow by Flame Torch..... *Zhu Aiqiang Jiang Chizhi Yuan Yousheng Wang Zhibin* (Nanjing Institute of Technology) (489)
- II-863073 The Decomposition Combustion of Monopropellant Droplet in Elevated Temperature Environment... *Hu Xiaoping Zhong Liangsheng Zhuang Fengchen* (National University of Defense Technology) (497)
- II-863074 Experimental Research on the Fuel Vaporization on the Surface of the Flameholder..... *Liu Zhikang Wang Jiahua* (Nanjing Aeronautical Institute) *Wu Gexin* (Nanjing Turbine-Electrical Works) (503)
- II-863075 Study on the Lateral Dispersion of Coal Particles in an Industrial-scale FBC..... *Xiang Qian Cen Kefa Huang Guoquan* (Zhejiang University) *Tao Tao* (Yongrang Power Station) (511)
- II-863076 The Experimental Research and Numerical Calculation of Swirling Combustion .....  
*Liu Wei Yan Chuanjun Wang Hongji Zhu Huiling Tang Ming*

- Wu Erping Chen Binglu* (Northwestern Polytechnical University) (517)
- II-863077 A Lagrangian-Eulerian Particle Model for Predictions of Pulverized-Coal Two-Phase Combustion.....*Zhou Lixing* (Tsinghua University) (527)
- II-863078 An Experimental Study on the Rapid Devolatilization of Pulverized Coal.....*Han Hongqiao*  
*Fu Weibiao Wang Difei Zhang Yanping* (Tsinghua University) (533)
- II-863079 A Study on CWM Ignition and Flame Stabilization .....*Lu Gaoqing Ren Shizheng* (Northeast University of Technology) (539)
- II-863080 Experimental Study of Bluff-Body Burner with Boundary Wind under Cold Air.....*Mi Jianchun*  
(Changsha Teacher's College of Water Conservancy and Electric Power)*Zeng Hancai* (Huazhong University of Science and Technology) (545)
- II-863081 Industrial Tests of CWS Combustion on an Oil-fired Boiler.....  
.....*Xie Minghu Lu Deshou Zhang Tiejun*  
*Cen Kefa Cao Xinyu Huang Zhenyu* (Zhejiang University) (557)
- II-863082 A Quasi-Steady Method for Performance Analysis of Batch Type Fuel-Firing Furnace Systems.....  
.....*Wang Cuncheng* (Tsinghua University) (565)
- II-863083 The Study on the Interdependence of Spray Characteristics and Evaporation History of Fuel Spray in High Temperature Air Crossflow  
.....*Zhu Junyong*  
*Jin Rushan* (Beijing Institute of Aeronautics and Astronautics) (571)

#### Part 4. THERMAL HYDROMECHANICS

- II-864084 An Experimental Investigation of Flow Field of a Turbine Vane with Film Cooling .....*Liu Dezheng Chen Jirui Ji Honghu* (Nanjing Aeronautical Institute) (585)
- II-864085 Aerodynamic Design and Experimental Research of Main Flow Blade for Nozzle Cascade with Multi-splitter Vanes.....*Zhang Zhigang Zhu Hong* (Shanghai Institute of Mechanical Engineering) (597)
- II-864086 An Analysis on Impulse Loss of the Solid-propellant Rocket Engine .....*Wang Nanyan* (East China Institute of Technology) (603)
- II-864087 Modification of Turbulent Vorticity Transport Equation.....*Li Youzhang Nung Can* (Beijing University of Iron and Steel Technology) (609)
- II-864088 The Experimental Research of Three Dimensional Swirling Field in Model Combustor.....*Tang Ming Zhu Huiling Yan Chuanjun*  
*Wu Erpin Cheng Binglu* (Northwestern Polytechnical University) (615)
- II-864089 Experimental Investigation of a Dual-Section-Variable-Blade Diffuser

- ..... *Xu Diao* (Nanjing Aeronautic Institute) *Liu Guangzong* (Xi'an Jiaotong University) (621)
- II-864090 Experimental Investigation of the Wake behind Cascades in the Axial Flow Compressor..... *Wang Yuzong*  
*Liu Jianhua Shi Jingxun* (Northwestern Polytechnical University) (627)
- II-864091 Experimental Investigation on the Flow Characteristics of the Internal Cooling Configuration of Turbine Blade's leading Edge.....  
..... *Kang Ying Qiu Xuguang*  
*Gnan Leiyang* (Beijing Institute of Aeronautics and Astronautics) (639)
- II-864092 Calculation of Separated Flows within Turbomachinery Cascades.....  
..... *Jiang Zikang Zhou Yaoqi* (Tsinghua University) (645)
- II-864093 Effect of Parameters to Flow Performances of Manifold Systems...  
*Yu Peizhen Wang Xinan* (Shanghai Institute of Mechanical Engineering) (653)
- II-864094 The Method for Determining the Flow Split Ratio of Air Which Flows in the Vanes with Splitter .....  
*Shi Daozhong Wang Jianhua* (Harbin Institute of Technology) (663)
- II-864095 A Quasi-Three Dimensional Design Method of Circular arc Blades Diagonal Flow Impeller Compared with Diagonal Flow Impeller of Airfoil Sections .....  
*Wu Keqi Cai Zhao-lin Ou Yingda* (Huazhong University of Science and Technology) (669)
- II-864096 The Onset of Two-phase Annular Flow.....  
..... *Chen Xuanzheng Chen Tingkuan* (Xi'an Jiaotong University) (675)
- II-864097 Numerical Solution of the Friction Coefficient of a Periodic Plused Flow through Coal Particle Assemblages .....  
..... *Fan Jianren Cen Kefa* (Zhejiang University) (683)
- II-864098 The Calculations and an Experimental Study on Void Fraction of Gas-Liquid Two-phase Flow in a Vertical Annular Channel.....  
..... *Qiu Dongming* (Nanjing Institute of Technology) *Jia Dounan* (Xi'an Jiaotong University) (691)
- II-864099 An Experimental Study and Energy Analysis of the Buoyant Influence on Thermal Wake Flow .....  
*Du Xianzhi Chen Boyi Hua Shunfang*( Naval Academy of Engineering) (699)
- II-864100 Thermal Deposition of Fine Particles in Pipe Flow of a Suspension .....  
..... *Cai Song Jin Renkui* (Nanjing Institute of Technology) (707)

## **Part 5. THERMOPHYSICAL MEASUREMENT**

- II-865101 Diagnostics of a Low Pressure r.f Plasma by the Triple-probe Method.....  
..... *Zhu Wenhao Wang Jiong Chen Yaoshan* (Tsinghua University) (715)