



中国国际影响力优秀学术期刊

ISSN 1672-8874

CN 43-1330/G4

**JOURNAL OF HIGHER EDUCATION RESEARCH**

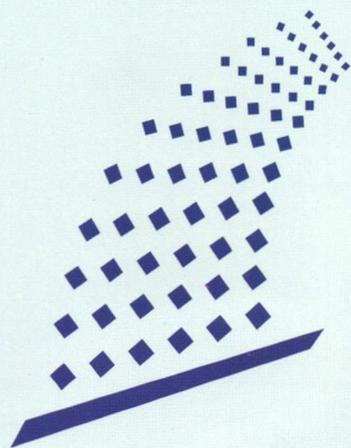
# 高等教育研究 学报

主办：国防科学技术大学

第36卷 增刊

Vol.36 Supplement

万方数据



## 2013.增刊

GAODENG JIAOYU YANJIU XUEBAO

· 中国国际影响力优秀学术期刊 ·

# 高等教育研究

JOURNAL OF HIGHER EDUCATION RESEARCH 学报

季刊, 总第 36 卷/增刊, 第 172 期

Quarterly, Vol. 36/Supplement, Serial No. 172

2013 年增刊(Supplement 2013) 目次

## 本刊全文收录:

- 中国核心期刊(遴选)数据库
- 中国期刊全文数据库(CJFD)
- 中国学术期刊综合评价数据库
- 中文科技期刊数据库(全文版)

## · 人才培养 ·

我校创新人才培养的若干思考 ..... 耿美华 王泽锋 (4)

激发本科生潜在创新能力的探讨 ..... 王 晓 刘雄伟 罗 强 (7)

锤炼军人意志 培养创新精神  
——学科竞赛在军校学员创新教育中的作用  
..... 贾 辉 孔 迪 李修建等 (10)

拔尖人才科研实践能力培养探索  
——以“钱学森创新拓展班”为例 ..... 贾红辉 耿美华 (12)

物理实践教学与创新人才培养 ..... 欧保全 周艳丽 吴 伟 (15)

化学实验教学与学员心理素质培育 ..... 陈 倩 满亚辉 吴文健 (19)

军校研究生评价体系研究 ..... 邹宏新 孟 梅 黄明球 (21)

学员队干部人格魅力探析 ..... 范年东 (24)

军校大学生慎独自律与优良作风培养 ..... 张振福 (27)

加强网络思想政治教育 引导 90 后新学员全面健康成长  
..... 王 干 谭 谛 (29)

微博盛行给军校学员管理带来的挑战及对策  
..... 吴 伟 黎 全 张 婷 (33)

德国教学科研体制对我国人才培养模式的启示  
..... 李永强 陆彦文 袁建民 (35)

## · 课程建设 ·

研究生数学公共课程体系建设 ..... 李 超 屈龙江 戴清平 (38)

《凝聚态物理导论》课程建设的思考 ..... 王 广 张学鹭 秦石乔 (42)

理科化学《高分子科学基础》课程建设与改革  
..... 蒋振华 李公义 楚增勇等 (45)



主管、主办:

国防科学技术大学

[期刊基本参数] CN43-1330/G4 \* 1978 \* q \* A4 \* 120 \* zh \* P \* ¥10.00 \* 1000 \* 39 \* 2013 - S0

大学物理实验课程开放型笔试考核题库建设	黎全 吴伟 黄松筠 (49)
整体性备课的认识与实践	
——以线性代数课程为例	海昕 文军 孙兵 (51)
MIT 近代物理实验课程特点及启示	黄松筠 何彪 (55)
IPAM 运作机制对理工院校交叉研究中心建设的思考	
	刘易成 易东云 (58)

### · 教学研究 ·

数学理论与数学应用在大学数学教育中的关系与作用	张新建 刘雄伟 童照春 (61)
提高《高等数学》课堂教学质量的“四个环节”	倪谷炎 周敏 李颖等 (65)
问题式课堂教学设计案例分析	刘雄伟 朱健民 李建平 (67)
基于任务驱动的概率统计课程实践型教学	刘吉英 (71)
改革大学物理课程教学 促进卓越军事人才培养	
	张晚云 曾交龙 沈曦等 (73)
新兴交叉学科背景下计算物理课程教学改革	
	徐志宏 冉宪文 汤文辉 (77)
理论物理研究型教学的探索与思考	刘永录 (80)
大学物理研讨式教学模式	林晓南 张祖荣 曹慧 (83)
如何激发学习大学物理的兴趣	侯永 戴佳钰 曾交龙 (86)
在大学物理中创设有意义的学习经历	黎双 李蓉 (88)
以学生为主体提高大学化学课程教学质量	王春华 (91)
案例教学法在军事院校大学化学课程教学中的应用	
	王璟 王清华 王春华 (94)

## 学报编委会

主任：邓小刚  
副主任：王正明  
王维平  
查亚兵

## 学报编辑部

主编：陈勇  
常务副主编：卢绍华  
副主编：胡志刚  
赵惠君

通信地址：湖南长沙国防科学技术大学  
《高等教育研究学报》编辑部  
联系电话：(地)0731-84572390、84572393  
(军)0731-572390、572393  
邮政编码：410073  
电子邮箱：gjshi@nudt.edu.cn

团队学习(TBL)教学模式在化学实验课程综合设计教学中的应用	肖华 王清华 (97)
生物学公共课教学的核心价值及其实现	吴磊 朱凌云 柳琬 (100)
本科生科技创新活动中的生物实验训练	柳琬 王千 孟尔 (103)
《武器战斗部投射与毁伤》课程的演示与仿真教学	
	蒋邦海 张舵 李翔宇等 (106)
军校本科毕业设计改革与创新	李建平 罗永 耿美华 (109)
新任教师提高课堂教学质量的思考	李宝娣 刘春林 (112)
国内外名校数学类公开课现状分析及启示	
	赵侠 黄金才 黄建华 (115)
新西兰 Otago 大学化学实验教学特色与借鉴	
	王清华 朱慧 李义和等 (118)

# JOURNAL OF HIGHER EDUCATION RESEARCH

Supplement, 2013 (Vol. 36/Supplement)

## MAIN CONTENTS

- Reflections On the Innovative Talents Training in Our School ..... *GENG Mei - hua, WAGN Ze - feng*(4)
- Study and Application on Inspiring Latent Innovation Ability of Undergraduate ..... *WANG Xiao, LIU Xiong - wei, et al*(7)
- A Study on the Function of Scientific and Technological Competition in Innovational Education for the Military Cadets  
..... *JIA Hui, KONG Di, et al*(10)
- On Cultivating Talents Research and Practical Ability; the School's "Tsien Hsueshen Innovation Class" as an Example  
..... *JIA Hong - hui, GENG Mei - hua*(12)
- Take Full Advantage of Physical Laboratories in Practical Teaching to Speedup the Cultivation of Innovative Talents  
..... *OU Bao - quan, ZHOU Yan - li, et al*(15)
- Exploration and Thinking of Mental Health Education infiltrated into Chemistry Experiment Teaching  
..... *CHEN Qian, MAN Ya - hui, et al*(19)
- A Study of Estimation System about Military Graduate Student ..... *ZOU Hong - xin, MENG Mei, et al*(21)
- Exploration of Student team's Cadres Charisma ..... *FAN Nian - dong*(24)
- Discussion on the Education of Caution Alone, Self - discipline and the Good Proletarian Style of Contemporary  
Military College Students ..... *ZHANG Zhen - fu*(27)
- Strengthening the Internet Ideological and Political Education to Guide the 90s Students' All - round and Healthy Development  
..... *WANG Gan, TAN Di*(29)
- On the influence of the twitter spreading on the supervision of military academy student and the corresponding countermeasures  
..... *WU wei, LI Quan, et al*(33)
- A Research on German Teaching and Scientific Research Systems and Its Revelation of Training Mode of Our Country  
..... *LI Yong - qiang, LU Yan - wen, et al*(35)
- Reflection on the construction of the Non - major Mathematics Curriculum System for Postgraduates  
..... *LI Chao, QU Long - jiang, et al*(38)
- The Development of Nano - science and the Cultivation of Creative Talents ..... *WANG Guang, ZHANG Xue - ao, et al*(42)
- Preliminary Discussion on the Course Construction and Reformation of Polymer Science  
..... *JIANG Zhen - hua, LI Gong - yi, et al*(45)
- Research on the Examination Bank of Physical Experiment of College ..... *LI Quan, WU Wei, et al*(49)
- Understanding and Practice of Course Preparation ..... *HAI Xin, WEN Jun, et al*(51)
- A Study on the Modern Physics Experiment in the MIT ..... *HUANG Song - jun, HE Biao*(55)
- Remarks on the Operating Mechanism in IPAM and Its Reflection on the Multidisciplinary Research Center in  
Polytechnic Universities ..... *LIU Yi - cheng, YI Dong - yun*(58)
- Relation and Function of Mathematical Theory and Application in University Mathematics Education  
..... *ZHANG Xin - jian, LIU Xiong - wei, et al*(61)
- Strengthening the Research on Each Link of Teaching and Improving the Teaching Quality of Advanced Mathematics Completely  
..... *NI Gu - yan, ZHOU Min, et al*(65)
- A Design Case of Problem - based Class Teaching: Directional Derivative and Gradient  
..... *LIU Xiong - wei, ZHU Jian - min, et al*(67)
- The Mission - derived Practical Instruction and Its Application in the Probability and Statistics Course ..... *LIU Ji - ying*(71)
- Research of Promoting Beyond Military Talents by Reforming College Physics Teaching  
..... *ZHANG Wan - Yun, ZENG Jiao - Long, et al*(73)
- Considerations on Teaching Reformation of Computational Physics with the Newly Developing Interdisciplinary Subject  
..... *XU Zhi - hong, RAN Xian - wen, et al*(77)
- Investigation on the Research - oriented Teaching Style in Courses of the Theoretical Physics ..... *LIU Yong - lu*(80)
- An Exploration of the Research - orientated Teaching Method for University Physics  
..... *LIN Xiao - nan, ZHANG Zu - rong, et al*(83)
- How to Inspire the Interest of Studying College Physics ..... *HOU Yong, DAI Jia - Yu, et al*(86)
- The Creation of Meaningful Learning Experiences for Students in College Physics Class ..... *LI Shuang, LI Rong*(88)
- Taking the Student as the Subject, Improving the Teaching Quality of College Chemistry Course ..... *WANG Chun - hua*(91)
- Application of Case Teaching Method in the Course of University Chemistry for Non - chemistry - major Students in a Military Universi-  
ty ..... *WANG Jing, WANG Qing hua, et al*(94)
- Team - Based Learning in the Course of Integrated Design for Chemistry Experiments ..... *XIAO Hua, WANG Qing - hua*(97)
- An Analysis on the Core Value and Its Realization of Biology Commonly Required ..... *WU Lei, ZHU Ling - Yun, et al*(100)
- Biology Experimental Training in the Activity of Undergraduate Science and Technology Innovation  
..... *LIU Long, WANG Gan, et al*(103)
- The Teaching Method in "Delivery and Lethality of Weapon Warhead" by Display and Simulation  
..... *JIANG Bang - hai, ZHANG Duo, et al*(106)
- A Discussion on Reform and Innovation of Undergraduate Graduation Design in Military Academies  
..... *LI Jian - ping, LUO Yong, et al*(109)
- Some Advice to New teachers in Universities ..... *LI Bao - di, LIU Chun - lin*(112)
- Some Enlightenments to Improve the Teaching Quality of Higher Mathematics from the Domestic and Foreign Elite Open Classes  
..... *ZHAO Xia, HUANG Jin - cai, et al*(115)
- Chemistry Experiment Teaching in Otago University and Its Enlightenment ..... *WANG Qing - hua, ZHU Hu, et al*(118)