

ISSN Q K1729246

阴山学刊

YINSHAN ACADEMIC JOURNAL

自然科学版

2017.4

第31卷 第4期

YINSHAN XUEKAN

包頭師範學院·主办

中国学术期刊
综合评价数据库来源期刊

万方数据库来源期刊

阴山学刊

YINSHAN

XUEKAN

(季刊)

目

录

自然科学
2017年第4期

第31卷
(总第92期)

2017年10月20日
出版

本期执行编辑
余海燕

期刊基本参数:CN15-1063/C
* 1982 * q * A4 * 168 * zh * P
* ¥20.00 * 1000 * 55 * 2017-010

· 数 学 ·

- 关于泊松积分计算逆向思维过程的剖析 陈建华(5)
正态分布函数与分布密度之间的简单近似关系 毛卫民(8)
改进 AHP 的模糊综合评价在突发事件应急能力中的应用
..... 贺晓春, 冯军军, 朱清溢(10)
初等旋转方阵的推广 王振彬, 贾明霞(13)

· 物 理 ·

- 从头算方法研究 H₂S 分子的非谐振力场和光谱常数
..... 庞伟秀, 孙运斌(15)
基于不同干扰类型的瞬变电磁滤波方法 曹 静, 吴灿灿(19)
基于 PFC^{3D}的堆积体休止角影响因素研究 丁点点, 刘发明, 刘 飞(22)

· 化 学 ·

- 苹果清汁饮料加工工艺的研究 张东京, 袁雨馨(25)

· 生 物 ·

- 红豆凝固型酸奶的研制 张东京, 孙玉雪, 高贵珍, 张兴桃(29)

· 体 育 ·

- 心率指标在网球运动训练监控中的应用 邱 丹(33)
乒乓球拍底板木材的特性、结构及技术革新研究 高宝龙(36)
CBA 优秀内外中锋球员攻防技术能力的比较研究 孙若凯, 盛绍增(39)
民族健身操对女性人体关节影响实证研究 彭程彩, 黄兆伟, 韦 霞(42)
2014 年男排世锦赛中国队失利原因及思考 骆书於(45)
行走中的希腊体育 叶 维(48)
中蒙武术交流与发展对策研究 周 梅, 田锡祥, 李 陆, 孙雪萍(52)
大学体育选项课开设双截棍课程的可行性分析 赵凯军(56)

· 信息 技术 ·

- 3 - 状态相异元件串联的 P-S 设备网络可靠性优化蚁群算法
..... 李东魁(59)
iTN 专线技术在电信运营商的应用研究 邱慧丽(62)
云计算的系统架构及技术分析 王雪丽, 胡 波(65)
基于 ZigBee 网络技术的家居智能化系统设计 侯海龙(68)
无线传感器网络 WSN 的 MAC 协议的分析与研究 吴文平(71)
基于 Landsat 影像植被覆盖度提取的研究 曹倩倩, 黄袁升(74)

· 资源 环境 ·

- 开挖进尺对隧道地表沉降变形影响研究 丁点点, 刘发明(77)
基于 COMSOL Multiphysics 的煤岩体渗流规律研究
..... 刘 飞, 张洪庆, 张建营, 黄明松(80)
基于 RS/GIS 的土地利用类型图制作与分析 戴洪宝, 许继影(83)
农村居民生活质量满意度及影响因素分析 高凤伟, 李耀红, 张 爽(86)

ZA 物业管理公司基层员工工作满意度分析 陈小芳, 邓福康(89)

· 教育教学 · 过程性教学评价专题 ·

- ISEC 项目面临的机遇与挑战 张晓勇, 张玉恒, 马学林, 杨 威(93)
试析高校物理实验教学改革 段玉梅(96)
信号与系统优秀课程建设 金 香, 赵建军, 周 敏(99)

· 教育教学 · 创新与创业教育专题 ·

- CAPM 模型在中国股票市场有效性的实证研究 王靖函(101)
废沥青混合料应用于桥梁路面的冲击系数研究
刘佳俊, 王 芳, 井德胜, 付 帅, 朱志勇(104)
基于随机森林的内江市降水量中长期预测
黄玺玮, 王 利, 杨双宁, 周 丽, 范 君(107)
科教融合培养大学生科技创新能力
李沙沙, 谢 永, 周丹红, 刘 超(111)
基于应用型人才创新能力培养的科研团队建设 周开胜, 戚晓明(113)
大数据背景下辅导员创新学生管理工作探究 赵丽莎(116)
基于土地确权的皖北地区三农问题解决路径分析 王娟娟, 周 冲(119)
皖北新型农村社区公共服务设施配置问题研究 任李嘉(122)

· 教育教学 ·

- “问题驱动”法在教学中的渗透与应用 任 敏, 张光辉(125)
以就业为导向的实习基地管理模式创新 姚美岑, 李明玉(128)
基于创新创业项目的 MCGS 组态软件课程教学研究
王大雷, 唐永刚, 汪材印, 黄 飞(132)
多元统计分析教学方法的改革 马 兰, 张祖峰, 武以敏, 李壮壮(135)
应用型本科数字化测图技术课程教学 朱 楠(137)
基于实践性和应用性的土木工程施工教学改革
李阳阳, 冯松宝, 孙 磊, 刘 飞(139)
应用型本科院校计量经济学的教学 武以敏, 高凤伟(142)
地方院校食品专业有机化学实验课程的改革探索
翟科峰, 张东京, 段 红, 张兴桃, 王海潮(145)
建设文理交融开放实验室提高应用型人才培养质量 李艳洁(148)
构建综合实验技能体系提升应用型人才培养质量
葛金龙, 李宗群, 王传虎(151)
湖南省高校学生篮球裁判员培养的研究 付 鹏(154)
中、澳两国中学体育课程标准的比较研究 吴卫军, 周祖辉, 赵小礼(156)
内蒙古高校开设足球社团可行性研究 乔建平(159)
高等院校瑜伽教学的若干思考 毛启霞(162)
高校体育课程德育教育的特点和优势 高 云, 戴秀秀, 邓 奎(165)
数学建模融入高职数学教学的思考 陶晓静, 杨 雄(167)

Yinshan Academic Journal

Natural Science Edition

No. 4 2017

Contents

Mathematics

Analysis of Reverse Thinking Process about the Poisson's Integral Calculation	CHEN Jian - hua (5)
Simply Approximate Relationships Between Normal Distribution Function and Its Density Function	MAO Wei - min (8)
Application of Fuzzy Comprehensive Evaluation in Emergency Response Capability Base on Analytic Hierarchy Process	HE Xiao - chun, FENG Jun - jun, ZHU Qing - yi (10)
Generalization of Elementary Rotating Square	WANG Zhen - bin, JIA Ming - xia (13)

Physics

Ab initio Study of Anharmonic Force Field and Spectroscopic Constants for H ₂ S	PANG Wei - xiu, SUN Yun - bin (15)
Filtering Method Based on the Different Types of Transient Electromagnetic Interference	CAO Jing, WU Can - can (19)
The Influence Factors of Repose Angle Based on PFC ^{3D}	DING Dian - dian, LIU Fa - ming, LIU Fei (22)

Chemistry

The Process Technology of Apple Beverage	ZHANG Dong - jing, YUAN Yu - xin (25)
--	---

Biology

The Solidifying Red Bean Yogurt of Excellent Turn Triturate	ZHANG Dong - jing, SUN Yu - xue, GAO Gui - zhen, ZHANG Xing - tao (29)
---	--

Physical Education

Application of Heart Rate Index in the Monitoring of Tennis Training	QIU Dan (33)
Study on the Characteristics, Structure and Technical Innovation of the Floor Wood of Table Tennis Racket	GAO Bao - long (36)
Comparative Research on the Defense and Attack Techniques of CBA Outstanding inside and outside Center Forwards	SUN Ruo - kai, SHENG Shao - zeng (39)
An Empirical Study on the Effect of the Teaching of National Aerobics on Lady Body Joints	PENG Cheng - cai, HUANG Zhao - wei, WEI Xia (42)
Rethinking the Defeat of Chinese Team in Men's World Volleyball Championship in 2014	LUO Shu - yu (45)
Walking in Greek Sport	YE Wei (48)
Research on the Exchange and Development Strategy of Wushu between China and Mongolia	ZHOU Mei, TIAN Xi - xiang, LI Lu, SUN Xue - ping (52)
Analysis on the Feasibility of Setting up the Nunchakus Course in College Physical Education Elective Course	ZHAO Kai - jun (56)

Information Technology

An ant Colony Algorithm for Three - state Non - identical Component Series's P - S Network Reliability Optimization	LI Dong - kui (59)
The Research of Application of the iTN Line Technology in Suzhou Unicom	QIU Hui - li (62)
Cloud Computing System Architecture and Technical Analysis	WANG Xue - li, HU Bo (65)
Design of Home Intelligent System Based on ZigBee Network Technology	HOU Hai - long (68)
Analysis and Research on MAC Protocol of Wireless Sensor Network	WU Wen - ping (71)
Research on Vegetation Coverage Extraction Based on Landsat Image	CAO Qian - qian, HUANG Yuan - sheng (74)

Resources Environment

- The Influence of Excavation Footage during Tunnel Construction DING Dian - dian, LIU Fa - ming (77)
Research on Seepage Law of Coal and Rock Mass Based on COMSOL Multiphysics LIU Fei, ZHANG Hong - qin, ZHANG Jian - ying, HUANG Ming - song (80)
Figure Production and Analysis of Land Use Types Based on the RS/GIS DAI Hong - bao, XU Ji - ying (83)
Life Quality Satisfaction of Rural Resident and Its Influencing Factors GAO Feng - wei, LI Yao - hong, ZHANG Shuang (86)
The Analysis of Job Satisfaction about Grassroots Employees in ZA Property Management Company CHEN Xiao - fang, DENG Fu - kang (89)

Education Teaching – Process Teaching Evaluation Project

- Opportunities and Challenges of ISEC Project ZHANG Xiao - yong, ZHANG Yu - heng, MA Xue - lin, YANG Wei (93)
Analysis of Universities Physical Experiment Teaching Reformation DUAN Yu - mei (96)
Practice and Experience of Constructing Signals and Systems Excellent Course JIN Xiang, ZHAO Jian - jun, ZHOU Min (99)

Education Teaching – Creativity & Entrepreneurship Project

- The Empirical Analysis of CAPM Model in China's Stock Market after Financial Crisis ... WANG Xiao - han (101)
Study of Dynamic Impact Factors of Concrete Bridge with Application of Reclaimed Asphalt Aggregate LIU Jia - jun, WANG Fang, JING De - sheng, FU Shuai, ZHU Zhi - yong (104)
Medium - to Long - Term Forecast of Precipitation of Neijiang City Based on Random Forest HUANG Xi - wei, WANG Li, YANG Shuang - ning, ZHOU Li, FAN Jun (107)
Cultivating Students' Innovation Ability of Science and Technology under Guidance of Combining Scientific Research and Teaching LI Sha - sha, XIE Yong, ZHOU Dan - hong, LIU Chao (111)
Discussion on the Construction of Scientific Research Team Based on Cultivating the Innovation Ability of Applied Talents ZHOU Kai - sheng, QI Xiao - ming (113)
Under the Background of Large Data to Explore Student Management Work ZHAO Li - sha (116)
The Analysis of Solutions Based on Confirmation of Land Right to Three Rural Issues of Northern Anhui WANG Juan - juan, ZHOU Chong (119)
Research on the Configuration Problems of Public Service Facilities in the New Rural Community in Northern Anhui Province REN Li - jia (122)

Education Teaching

- Permeation and Application on "Problem Driven" Method in Probability and Statistics Teaching REN Min, ZHANG Guang - hui (125)
The Management Mode Innovation Base with Employment Oriented Practice YAO Mei - cen, LI Ming - yu (128)
Teaching Research of MCGS Configuration Software Course Based on Innovation and Entrepreneurial Project WANG Da - lei, TANG Yong - gang , WANG Cai - yin, HUANG - Fei (132)
Reform on the Teaching Method of the Multivariate Statistical Analysis Course MA Lan, ZHANG Zu - feng, WU Yi - min, LI Zhuang - zhuang (135)
Explorations of Digital Mapping Technique Course during Application Oriented Undergraduate Education ZHU Nan (137)
Teaching Reform of Civil Engineering Construction Course Based on the Practicality and Applicability LI Yang - yang, FENG Song - bao, SUN Lei, LIU Fei (139)
The Teaching of Econometrics in Applied Universities WU Yi - min, GAO Feng - wei (142)
Teaching Reform and Practice of Organic Chemistry Experiment on Food Specialty in Local Universities ZHAI Ke - feng, ZHANG Dong - jing, DUAN Hong, ZHANG Xing - tao, WANG Hai - chao (145)
Building Open Laboratory of Liberal Arts and Science to Improve the Quality of Applied Talents LI Yan - jie, GE Jin - long (148)
Constructing Comprehensive Experimental Skills System to Improve the Training Quality of Applied Talents GE Jin - long, LI Zong - qun, WANG Chuan - hu (151)
Study of Students Basketball Referee Training in Hunan Province FU Peng (154)
The Research on the Comparison of Physical Education Curriculum Standard in Middle Schools between China and Australia WU Wei - jun, ZHOU Zu - hui, ZHAO Xiao - li (156)
The Feasibility Study on Setting up Football Association in Inner Mongolia Colleges and Universities QIAO Jian - ping (159)
Reflections on Yoga Teaching in Universities MAO Qi - xia (162)
The Characteristics and Advantages of Moral Education in College Physical Education Curriculum System GAO Yun, DAI Kui - xi, DENG Kui (165)
Thinking of Mathematical Modeling in Higher Vocational Mathematics Teaching TAO Xiao - jing, YANG Xiong (167)

刊名题字 王岳川
封面设计 杨镇宇 张一宁

阴山学刊(自然科学版)编委会

主任 刘兴旺

副主任 双山 李东魁

委员 门中华 马占飞 双山 车志宏

王静 刘兴旺 李东魁 李金霞

吴鸿业 赵国忠 董贵成 雍胜利

阴山学刊

YINSHAN XUEKAN

季刊

(1982年创刊)

2017年第4期

第31卷 总第92期

YINSHAN ACADEMIC JOURNAL

Quarterly

(Started in 1982)

No.4,2017

Vol.31 Sum No.92

主管单位 内蒙古自治区教育厅

主办单位 包头师范学院

(内蒙古包头市青山区科学路3号)

编辑出版 《阴山学刊》编辑部

邮政编码 014030

电 话 (0472)6193324

网 址 <http://www.btcc.edu.cn/xbbjb>

电子信箱 xbbjbn@btcc.edu.cn

主 编 李东魁

印 刷 单 位 包钢印刷厂

发 行 单 位 本刊编辑部

国 外 订 购 中国教育图书进出口公司出口部

国外发行代号 JSSC-D07

出 版 日 期 2017年10月20日

Competent Department: Inner Mongolia Education Bureau

Sponsor: Baotou Teachers College

Address: 3, Science Road,

Qingshan District, Baotou,
Inner Mongolia

Editor-Publisher: Ed. Dept. of Yinshan Academic Journal

Chief Editor: LI Dong-kui

Overseas Distributor: Export Department of China Educational Book Ex-im Corporation

Overseas Issuing Code: JSSC-D07

Publishing Date: 20 October 2017

国内统一刊号 CN15-1063/C

国际标准刊号 ISSN1004-1869

ISSN 1004-1869



9 771004 186007

定价：20.00元