

- 《中国学术期刊综合评价数据库》统计源刊
- 《中国期刊全文数据库》全文收录期刊
- 《中国核心期刊(遴选)数据库》全文收录期刊

- 美国《化学文摘》(CA)重点收录期刊
- 全国石油和化工行业优秀期刊
- 广东省、广州市优秀科技期刊

ISSN 1001-9677

CN44-1228/TQ

广州化工

GUANGZHOU CHEMICAL INDUSTRY

第20期
2017年10月
(下半月)
第45卷

广州化工研究设计院

广州市化工行业协会

广州市化学化工学会

万力创新园
聚万力 创智造



万力轮胎营销中心 万力橡胶轮胎研究院 万力化工研究院 万力中乌精细化工联合研究院

万方数据

地址：广州市白云区石井镇联和路2号万力创新园

邮编：510425

目 次

广州化工

GUANGZHOU HUAGONG

《中国学术期刊综合评价数据库》统计源刊
《中国核心期刊(遴选)数据库》全文收录期刊

《中国期刊全文数据库》全文收录期刊
高、中级化工职称资格评审认定期刊

1973 年创刊(半月刊)

第 45 卷第 20 期

2017 年 10 月(下半月)

主 管:广州化工集团有限公司

主 办:广州化工研究设计院

广州市化工行业协会

协 办:广州市化学化工学会

编辑出版:《广州化工》编辑部

主 编:吴文莉

副 主 编:林珺颖

编 辑:刘倩婷、何启宏

广 告:茅仁旭

地 址:广州市白云区石井镇联和路 2 号
万力创新园 D 座

邮 码:510425

电 话:(020)36372165

邮 箱:gzhgbjb@vip.126.com

网 址:<http://www.gzhgbjb.cn>

印 刷:南方医科大学广州广卫印刷厂

发行范围:国内外公开发行

国外发行:中国出版对外贸易总公司
(北京 782 信箱)

国际标准刊号:ISSN1001-9677

国内统一刊号:CN44-1228/TQ

广告经营许可证:穗工商广字 4401004002668 号

出版物经营许可证:新出发粤刊总批字第 226 号

收款单位:广州化工研究设计院

开户银行:广州市工商银行石井支行

帐 号:3602025309000823574

国内定价:13.00 元/期 全年 295.00 元(共 24 期)

第八届编委会成员名单

主任:崔英德

副主任:叶家灿 白 莉

秘书长:张 统

委员:(排名不分先后)

钱 宇 童叶翔 余 林 王乐夫 何榕友

杨育农 马小明 郑 成 麦堪成 彭 峰

赵建青 尹国强 刘自力 李大光 杨定乔

黄道平 李攻科 刘国光 陈国华 董新法

方岩雄 刘晓国 李雪辉 陈旭东 李锡安

梁基照 熊亚曾庆焕 罗国钦 余慧文

专论与综述

四参数方程关联纯物质的蒸汽压 陈 漓(1)

水环境中持久性有机污染物光降解研究进展

..... 邓丽君, 欧晓霞, 毕馨丹, 鲍雅静, 王驭晗(3)

壳聚糖及其衍生物抗菌活性的研究进展

..... 梁丽媚, 李思东, 李程鹏, 侯婷婷(6)

纳米银生物制备的研究进展 黄 玲, 石 磊, 龚盛昭(10)

原子吸收技术的最新进展及其应用 杨正良(13)

国内连续玻纤增强 PU 复合材料的研究现状

..... 吴向阳, 王之冰, 王 霞, 李 颖, 蔡东升(16)

食用菌抗氧化成分及抗氧化机制研究进展

..... 唐巧娟, 吴红燕, 刘彩琴(19)

从化学成分变化及检测看黄芩炮制的质量控制 ... 李秀贤(22)

煤制乙烯及乙烯聚合生产现状 宋彩霞, 雍晓静(25)

我国烟草农药残留现状及解决措施

吴哲宽, 覃光炯, 余 振, 许汝冰, 饶雄飞, 杨艳华, 兰明蓉(27)

科学实验

氧化锆-磁性壳聚糖材料对磷酸盐的吸附研究

..... 安风霞, 刘景亮(29)

不同拓扑结构嵌段聚合物胶束载药性能的 DPD 模拟 程应朝,

周浩铿, 胡伟灿, 刘绮颖, 李志伟, 李顺华, 郝向英, 吴文胜(33)

硫酸/辛烷磺酸钠催化酮肟 Beckmann 重排反应研究

..... 陈 豪, 祝晨静, 陶 阳, 翁立洋, 齐德强(38)

聚丙烯/纳米碳酸钙复合材料的热降解动力学

..... 李丽霞, 任金忠(41)

ZnO/g-C₃N₄的制备及其光催化性能研究

..... 石 怡, 郝迷花, 余倩倩(44)

介孔 TiN 粉体的合成及其电化学性能

呼世磊, 魏恒勇, 倪 洁, 卜景龙, 刘 盼, 吕东风, 崔 焱(46)

1-苯甲基-3-苯基-1H-吡唑-5-甲酸乙酯衍生物的合成及表征	.....	俞柯吉,游金宗,张一平,王珍珍,童胜跃,胡琼,齐德强(50)
$\text{Lu}_2\text{O}_3:\text{Eu}$ 与 $(\text{Lu},\text{Gd})_2\text{O}_3:\text{Eu}$ 透明闪烁陶瓷的性能对比研究	.....	解伟峰,王静(53)
无水乙醇中 Pr(Ⅲ) 的电化学行为及 Pr-Ni-B 合金膜制备	.....	何敏,陈必清,李苗,王欣(56)
二苯甲烷二异氰酸酯改性羟基聚二甲基硅氧烷的研究	.....	王培(60)
木犀草素-铕(Ⅲ)配合物的制备及生物活性研究	.....	郭明鑫,袁晓菲,郭蒙,杨健(63)
西咪替丁在人工模拟胃肠液的稳定性研究	.....	张毅,张丽,蔡进,汤磊(65)
黄连解毒汤有效成分抗内毒素血症的活性研究	.....	王为,高紫丹,刘雨浓,张强,胡洋,陈桂荣(68)
油膜法处理中低浓度氨氮废水的研究	.....	卢玉献,李群,肖一泓,周军党(71)
秸秆氨化改性条件对农田土壤中铜离子的去除研究	.....	蓝碧健(73)
二至密黑洗发乳的研制	.....	宋巧运,臧金鹏,张景媛,郭华(76)
龙凤山气田抗高温防塌钻井液研究与应用	.....	杨兴福,刘海军,李海军,黄科(79)
响应面分析法优化金槐总黄酮的提取工艺	.....	王峥,曾凡荣,舒俊翔,荣嵘,刘芳(82)
<i>Acidithiobacillus ferrooxidans</i> 去除水中 Ni^{2+} 、 Mn^{2+} 、 Cd^{2+} 机理的研究	.....	张艳林,金思明,蔡云梅,邹志辉,王智美,陈炳辉(86)

分析测试

茶油化学成分组成分析	.....	蔡春辉,吴崇明(89)
五株红藻次级代谢产物化学筛选	.....	巫崇婷,黄振,高玉玺,刘宇,徐曦萌,孙好芬(91)
高效磷光 [$\text{Pt}(\text{O}^{\wedge}\text{N}^{\wedge}\text{C}^{\wedge}\text{N})$] 配合物的光谱分析	.....	金丽,刘芳同,王影,张建坡,李岩(95)
桑枝化学成分提取及其在卷烟中的应用	.....	佟亚楠,李宝志,刘文春,李凤琴,李锋,李河霖(98)
超高效液相色谱法测定稻田水和土壤中氟氯草酯及其代谢产物	.....	董婷,罗泽江(100)
药品中氟沙星的金纳米光度测定法	.....	张晓宇,赵美宇,曹艳蓉,李满秀,李海平(103)
稀土转化膜的形貌和组成分析	.....	李强,海平(106)
容量仪器容量不确定度的评定与计算	.....	毛玲玲,邱雪芬,招丽香(108)
原子吸收法测定土壤中镉的不确定度评定	.....	钱毅玲(110)

环境保护

舟山长白岛邻近海域沉积物重金属污染及生态风险	.....	胡红美,张露,郭远明,李铁军,刘琴,杨承虎,宋凯,李子孟,王范盛(114)
汕头龙湖沟河段水质状况监测与评价对策	.....	郑德论(117)
石化行业泄漏检测与修复评估抽样方法研究	.....	郑幸成,黄浩云,陈璐,文晨,吉晟,谢华生(120)
水质总氮的精密度偏性实验分析	.....	迟伟伟,苟德国(123)

化工机械

S-ZORB 装置膨胀节存在问题及解决措施 郭伟平(125)

生产技术

调和法生产-35#车用柴油工业化应用 田超,朱文龙,马春阳(127)

裂解分离系统能量有效利用 张海峰,苏春生(130)

教学园地

薄层色谱法分离色素实验的改进 刘聘,邵建斌,林达,朱金涛,张一平(134)

关于多孔氧化铝陶瓷体积密度测定实验的一些探讨 高远飞,司朝霞,王利娟,张雪勤(137)

微波消化测定奶制品钙含量的微型化实验 张海波,陈云华,丁琼(140)

启发性教学在 Fe(OH)₃溶胶电泳实验中的应用 刘金水,李明亮(143)

应化专业物理化学自主性实验的改革与探索 赵红梅,徐俊驹,刘龙江,马俊蓉,卜玉涛,赵艳,刘云华,沈晓静,秦向东(145)

《高分子化学》“配位聚合”教学中的几点体会 杨敏(147)

《化学反应过程》教学方法初探 杨凤丽,汪斌(150)

环境系统工程课程教学改革研究及应用 赵雅琴,何士龙,王丽萍,袁丽梅,雷灵琰(152)

物理化学实验移动开放式网络教学探索 刘丽萍,张世珍,尹云(154)

材料化学“机械设计基础”课程教学改革探索 刘郁葱,颜韵琪,陈磊,黄波(156)

《材料成型原理》课程的实验教学改革探索 胡小武,江雄心,李玉龙(158)

化工安全复合型人才高等教育模式探索与实践 韩丰磊,陈静,孔瑞瑞,赵朝成,赵东风(160)

雨课堂+PPT 教学在物理化学中的应用 陈海玲(163)

医用化学应用 PBL 教学法的教学实践探索 席晓岚,杨清,汪莉蓉,刘敏洁(165)

基于应用型人才培养的化工实践教学体系 周跃花,孙平,李学坤,石奇,范磊刚(167)

无机化学实验室科学化管理的探索与实践 曹忠良,方芳,吴丹(170)

药学综合实验教学体系的建立及实践思考 吴迪,焦雪,令狐浪,袁泽利,何芋岐(172)

基于学科交叉融合的化学实验教学研究与探讨 周硕林,申鑫玉,李家其(174)

环境工程专业英语教学体会与改革 张根林,徐小琳,刘子龙(176)

染整工艺原理实验教师团队建设 丁娟,汪青,周伟涛,黄鑫,于保康(178)

地方院校应用化学专业创新创业人才培养模式初探 刘葵(181)

转型背景下中外合作办学实验教学改革初探 曹英寒,罗建成,叶红勇,李津(184)

面向生物工程专业的药物化学教学改革探讨 李媛,董萌,钟桐生,刘石泉,谢丹(186)

应用型高校应用化学专业仪器分析课程教学改革探讨 毛雪华(188)

基于毕业设计数据安全工程专业人才培养改革 魏春荣,孙建华,张迎新,张锦鹏,王亚军(190)

CONTENTS

Four Parameter Equation Relating Vapor Pressure of Pure Material	CHEN Li(1)
Research Progress on Photodegradation of Persistent Organic Pollutants in Aqueous Solution	DENG Li-jun, OU Xiao-xia, BI Xin-dan, BAO Ya-jing, WANG Yu-han(3)
Research Progress on Antibacterial Activity of Citosan and Its Derivatives	LIANG Li-mei, LI Si-dong, LI Cheng-peng, HOU Ting-ting(6)
Research Progress on Biosynthesis of Silver Nanoparticles	HUANG Ling, SHI Lei, GONG Sheng-zhao(10)
Atomic Absorption of New Developments in Technology and Its Application	YANG Zheng-liang(13)
Domestic Study on Continuous Glass Fiber Reinforced Polyurethane Composites	WU Xiang-yang, WANG Zhi-bing, WANG Xia, LI Ying, CAI Dong-sheng(16)
Research Progress on Antioxidant Ingredient and Mechanisms of Edible Mushrooms	TANG Qiao-juan, WU Hong-yan, LIU Cai-qin(19)
Quality Control of Processing of <i>Scutellaria baicalensis</i> from Change and Detection of Chemical Components	LI Xiu-xian(22)
Production Status of Ethylene Polymerization and Ethylene in Coal	SONG Cai-xia, YONG Xiao-jing(25)
Present Situation and Solutions of Tobacco Pesticide Residues in China	WU Zhe-kuan, QIN Guang-jiong, YU Zhen, XU Ru-bing, RAO Xiong-fei, YANG Yan-hua, LAN Ming-rong(27)
Adsorption of Phosphate by ZrO ₂ -magnetic Chitosan	AN Feng-xia, LIU Jing-liang(29)
DPD Simulation Study on Drug-loading Property of Block Polymer Micelle for Different Topology Polymer	CHENG Ying-chao, ZHOU Hao-keng, HU Wei-can, LIU Qi-ying, LI Zhi-wei, LI Shun-hua, HAO Xiang-ying, WU Wen-sheng(33)
Study on Beckmann Rearrangement of Ketoximes Catalyzed by Sulfur Acid/Sodium Octane Sulfonate	CHEN Hao, ZHU Chen-jing, TAO Yang, WENG Li-ying, QI De-qiang(38)
Thermal Degradation Kinetics of Polypropylene/Nano-CaCO ₃ Composites	LI Li-xia, REN Jin-zhong(41)
Study on Preparation and Photocatalysis Properties of ZnO/g-C ₃ N ₄ Composites	SHI Yi, HAO Mi-hua, YU Qian-qian(44)
Preparation of Mesoporous TiN Powders and Its Electrochemical Performance	HU Shi-lei, WEI Heng-yong, NI Jie, BU Jing-long, LIU Pan, LV Dong-feng, CUI Yi(46)
Synthesis and Characterization of Ethyl 1-Benzyl-3-phenyl-1H-pyrazole-5-carboxylate Derivatives	YU Ke-ji, YOU Jin-zong, ZHANG Yi-ping, WANG Zhen-zhen, TONG Sheng-yue, HU Qiong, QI De-qiang(50)
Comparative Study on Properties of Lu ₂ O ₃ :Eu Transparent Scintillation Ceramics and (Lu,Gd) ₂ O ₃ :Eu Transparent Scintillation Ceramics	XIE Wei-feng, WANG Jing(53)
Electrochemical Behavior of Praseodymium(III) in Ethanol and Preparation of Pr-Ni-B Alloy Films	HE Min, CHEN Bi-qing, LI Miao, WANG Xin(56)
Study on Modification of Hydroxy-terminated Polydimethylsiloxane by Diphenyl-methane-diisocyanato	WANG Pei(60)
Preparation and Bioactivity of Luteolin-Eu(III) Complex	GUO Ming-xin, YUAN Xiao-fei, GUO Meng, YANG Jian(63)
Study on Stability of Cimetidine in Artificial Simulated Gastrointestinal Fluid	ZHANG Yi, ZHANG Li, CAI Jin, TANG Lei(65)
Study on Anti-sepsis Activity of Effective Components from Huanglian Jiedu Decoction by Biosensor Technology	WANG Wei, GAO Zi-dan, LIU Yu-nong, ZHANG Qiang, HU Yang, CHEN Gui-rong(68)
Study on Low Concentration Ammonia Nitrogen Wastewater Treatment by Oil Film Method	LU Yu-xian, LI Qun, XIAO Yi-hong, ZHOU Jun-dang(71)
Study on Effects of Ammonium Modification of Straw on Removal of Copper Ion from Agricultural Soil	LAN Bi-jian(73)
Study on Preparation of Erzhi Dense Black Shampoo	SONG Qiao-yun, ZANG Jin-peng, ZHANG Jing-yuan, GUO Hua(76)
万方数据.....	

Research and Application of High Temperature Resistance and Anti-sloughing Drilling Fluid in Longfengshan Gas Field	YANG Xing-fu, LIU Hai-jun, LI Hai-jun, HUANG Ke(79)
Optimization of Extraction Technology of Total Flavone from <i>SoPhora japonica L.</i> Using Response Surface Analysis	WANG Zheng, ZENG Fan-rong, SHU Jun-xiang, RONG Rong, LIU Fang(82)
Study on Mechanism of Ni ²⁺ , Mn ²⁺ and Cd ²⁺ Removal by <i>Acidithiobacillus ferrooxidans</i> in Water	ZHANG Yan-lin, JIN Si-ming, CAI Yun-mei, ZOU Zhi-hui, WANG Zhi-mei, CHEN Bing-hui(86)
Chemical Constituents of Camellia Oil	CAI Chun-hui, WU Chong-ming(89)
Chemical Screening of Secondary Metabolites of Five Large Red Algae in Qingdao Coastal Areas	WU Chong-ting, HUANG Zhen, GAO Yu-xi, LIU Yu, XU Xi-meng, SUN Hao-fen(91)
Spectroscopy Analysis of Promising Highly Efficient Phosphorescent [Pt(O ⁺ N ⁺ C ⁻ N)] Complexes	JIN Li, LIU Fang-tong, WANG Ying, ZHANG Jian-po, LI Yan(95)
Simultaneous Distillation Extraction of Ramulus Mori and Its Application in Cigarette	TONG Ya-nan, LI Bao-zhi, LIU Wen-chun, LI Feng-qin, LI Feng, LI He-lin(98)
Determination of Cyhalofop – butyl and Its Pramry Metabolites Residues in Paddy Water and Paddy Soil Using Ultraperformance Liquid Chromatography	DONG Ting, LUO Ze-jiang (100)
Determination of Ofloxacin in Drug by Gold Nanoparticles Spectrophotometry	ZHANG Xiao-yu, ZHAO Mei-yu, CAO Yan-rong, LI Man-xiu, LI Hai-ping(103)
Analysis of Morphology and Composition of Rare Earth Conversion Coating	LI Qiang, HAI Ping(106)
Uncertainly Evaluation of Volumetric Apparatus Capacity	MAO Ling-ling, QIU Xue-fen, ZHAO Li-xiang(108)
Evaluation of Uncertainty in Determination of Cadmium in Soil by Atomic Absorption Spectrometry	QIAN Yi-ling(110)
Heavy Metals Pollution and Their Potential Ecological Risk Assessment in Surface Sediments from Adjacent Waters of Changbai Island, Zhoushan	HU Hong-mei, ZHANG Lu, GUO Yuan-ming, LI Tie-jun, LIU Qin, YANG Cheng-hu, SONG Kai, LI Zi-meng, WANG Fan-sheng(114)
Water Quality Monitoring and Evaluation with Several Countermeasures of Shantou Longhu Ditches Section	ZHENG De-lun(117)
Study on Sampling Method of Leak Detection and Repair Evaluation in Petrochemical Industry	ZHENG Xing-cheng, HUANG Hao-yun, CHEN Lu, WEN Chen, JI Sheng, XIE Hua-sheng(120)
Accuracy Deviation Analysis of Total Nitrogen in Water	CHI Wei-wei, GOU De-guo(123)
Problems Existing in Expansion Joint of S-ZORB Unit and Solutions	GUO Wei-ping(125)
Industrial Application of -35# Automobile Diesel Fuels Produced by Blending Method	TIAN Chao, ZHU Wen-long, MA Chun-yang(127)
Efficient Use of Energy in Cracking Separation System	ZHANG Hai-feng, SU Chun-sheng(130)
Improvement of Separation of Pigments by TLC	LIU Dan, SHAO Jian-bin, LIN Da, ZHU Jin-tao, ZHANG Yi-ping(134)
Discussion and Improvement Experiment Approach in Volume Density Measurement of Porous Alumina Ceramic	GAO Yuan-fei, SI Zhao-xia, WANG Li-juan, ZHANG Xue-qin(137)
Determination of Calcium Concentration in Dairy Products by Microwave Digestion and Micro-titration	ZHANG Hai-bo, CHEN Yun-hua, DING Qiong(140)
Application of Enlightening Teaching in Fe(OH) ₃ Sol Electrophoresis Experiment	LIU Jin-shui, LI Ming-liang(143)
Exploration and Reform on Innovation Experiment of Physical Chemistry Experiment on Applied Chemistry Specialty	ZHAO Hong-mei, XU Jun-ju, LIU Long-jiang, MA Jun-rong, BO Yu-tao, ZHAO Yan, LIU Yun-hua, SHEN Xiao-jing, QIN Xiang-dong(145)
Some Experience on Teaching of Coordination Polymerization in Polymer Chemistry	YANG Min(147)
Preliminary Exploration on Teaching of Chemical Reaction Engineering	YANG Feng-li, WANG Bin(150)

- Research and Practice on Environment System Engineering Curriculum Reform *ZHAO Ya-qin, HE Shi-long, WANG Li-ping, YUAN Li-mei, LEI Ling-yan*(152)
- Open Network Teaching Exploration of Physical Chemistry Experiment *LIU Li-ping, ZHANG Shi-zhen, YIN Yun*(154)
- Teaching Reform and Exploration on Fundamentals of Mechanical Design in Material Chemistry
..... *LIU Yu-cong, YAN Yun-qi, CHEN Lei, HUANG Bo*(156)
- Exploration on Experimental Teaching of Principle of Materials Formation ... *HU Xiao-wu, JIANG Xiong-xin, LI Yu-long*(158)
- Exploration and Practice of Chemical Process Safety Interdisciplinary Education *HAN Feng-lei, CHEN Jing, ... KONG Rui-rui, ZHAO Chao-cheng, ZHAO Dong-feng*(160)
- Application of Rain Classroom+PPT Lecture in Physical Chemistry *CHEN Hai-ling*(163)
- Practice and Research of Problem – based Learning Method in Teaching of Medical Chemistry
..... *XI Xiao-lan, YANG Qing, WANG Li-rong, LIU Min-jie*(165)
- Practice Teaching System of Chemical Engineering Based on Applied Talents Training
..... *ZHOU Yue-hua, SUN Ping, LI Xue-kun, SHI Qi, FAN Lei-gang*(167)
- Exploration and Practice on Scientific Management of Inorganic Chemistry Laboratory
..... *CAO Zhong-liang, FANG Fang, WU Dan*(170)
- Establishment and Practice of Pharmaceutical Comprehensive Experimental Teaching System
..... *WU Di, JIAO Xue, LING Hu-lang, YUAN Zhe-li, HE Yu-qi*(172)
- Research and Discussions on Chemical Experimental Teaching Reform Based on Multi-disciplinary Integration
..... *ZHOU Shuo-lin, SHEN Xin-yu, LI Jia-qi*(174)
- Experience and Reform on Teaching of English for Environmental Engineering
..... *ZHANG Gen-lin, XU Xiao-lin, LIU Zi-long*(176)
- Team Construction for Teachers of Dyeing and Finishing Process Experiment *DING Juan, WANG Qing, ZHOU Wei-tao, HUANG Xin, YU Bao-kang*(178)
- Exploration on Training Mode of Innovative and Entrepreneurial Talents of Applied Chemistry Specialty in Local Colleges
..... *LIU Kui*(181)
- Exploration on Experimental Teaching Reform of Sino – foreign Cooperative Education in Transforming Universities
..... *CAO Ying-han, LUO Jian-cheng, YE Hong-yong, LI Jin*(184)
- Discussion on Teaching Reform of Pharmaceutical Chemistry Facing Biological Engineering *LI Yuan, DONG Meng, ZHONG Tong-sheng, LIU Shi-quan, XIE Dan*(186)
- Discussion on Teaching Reform of Instrumental Analysis for Applied Chemistry Specialty in Applied Undergraduate Universities
..... *MAO Xue-hua*(188)
- Discussion on Reform of Talents Cultivation Mode Based on Graduation Design *WEI Chun-rong, SUN Jian-hua, ZHANG 反方数据, ZHANG Jin-peng, WANG Ya-jun*(190)

GUANGZHOU CHEMICAL INDUSTRY

Open Publishing

Established in 1973 (Semimonthly)

Vol. 45 No. 20

Oct. 2017

Managed by:

Guangzhou Chemical Industrial Group Co. , Ltd.

Sponsored by:

Guangzhou Research & Design Institute of Chemical Industry

Guangzhou Society of Chemistry and Chemical Engineering

Assisted by:

Guangzhou Chemical Industry Association

Edited by:

Editorial Office of “ GUANGZHOU CHEMICAL INDUSTRY”

Chief Editor: WU Wen-li

Vice Chief Editor: LIN Jun-ying

Editor: LIU Qian-ting, HE Qi-hong

Advertisement Department: MAO Ren-xu

Address: Building D, Vanlead Innovation Park , No. 2

Lianhe Road, Shijing Town, Baiyun District,
Guangzhou, P. R. China

Postcode: 510425

Tel: (020) 36372165

E-mail: gzhgbjb@vip. 126. com

Website: <http://www.gzhgbjb. cn>

Printed by:

Guangzhou Guangwei Printing Plant of Southern Medical University

Overseas Distributed by:

China National Publishing Industry Trading Corporation

Journal Code: ISSN 1001-9677
CN 44-1228/TQ

Adverxising Business License No. :4401004002668