



ISSN 1673-6273
CN 23-1544/R
CODEN SXJTA8

XIAN DAI SHENG WU YI XUE JIN ZHAN
现代生物医学进展
PROGRESS IN MODERN BIOMEDICINE

中国科技核心期刊

科技部中国科技论文统计源期刊

中国学术期刊网络出版总库 (CNKI) 收录期刊

美国化学文摘 (CA) 检索期刊

俄罗斯文摘杂志 (AJ) 收录期刊

英国国际农业与生物科学研究中心 (CABI) 数据库收录期刊

美国剑桥文摘 (CSA) 收录期刊

英国Global Health数据库收录期刊

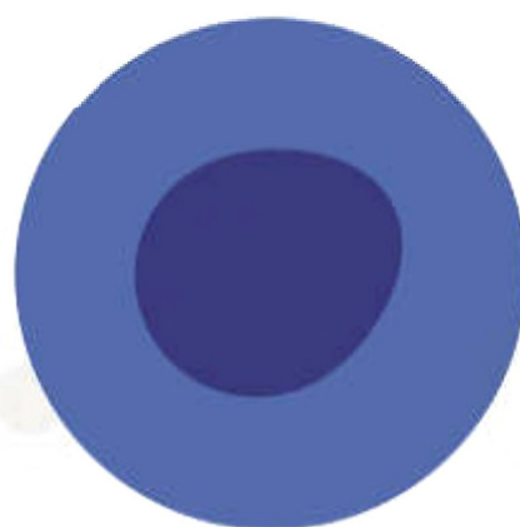
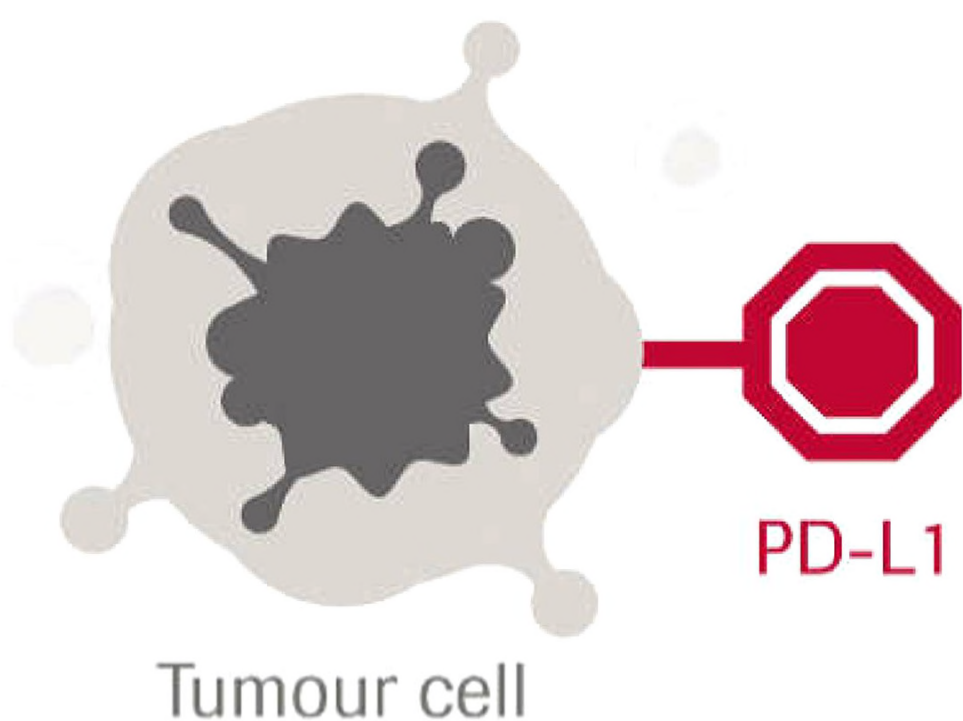
Genamics Journal Seek收录期刊

美国ProQuest数据库收录期刊

美国EBSCO数据库收录期刊

波兰哥白尼索引 (IC) 收录期刊

WHO西太区医学索引 (WPRIM) 收录期刊



2019年第19卷 (第5期)

ISSN 1673-6273



现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第19卷 第5期 2019年3月15日出版 Progress in Modern Biomedicine

主 管:黑龙江省卫生厅
主 办:黑龙江省森工总医院
哈尔滨医科大学附属第四医院
协 办:哈尔滨工业大学
上海交通大学附属第一人民医院
编 辑:现代生物医学进展编辑委员会
150040 哈尔滨市和兴路 32 号
电 话:0451-82583800
E-mail:biomed_54@126.com
E-mail:liudhui_21@126.com
E-mail:biomagnetism@163.com
http://biomed.cnjournals.com
http://www.shengwuyixue.com
http://swcx.periodicals.net.cn
学 术 顾 问: 杨宝峰 刘颂豪
阮长耿 曾溢滔 贺 林
傅世英 王迺谦 刘玉清
郝希山 曾益新 张岂凡
主 编: 赵长久
执 行 主 编: 吴文忠
执行副主编: 孟庆刚
副 主 编: 李 钰 张贵祥
黄文华 黄菊芳 刘 平
吕传柱 曾乐平 唐一源
曾凡一 刘 明 代文杰
张清媛
编辑部主任: 刘同奎
编辑部副主任:
刘子馨 谢建平 郑林丰
编辑部地址:150001,哈尔滨市 54 号信箱
(哈尔滨市花园街 184 号 403)
电 话:0451-82583800 0451-53658268
传 真:0451-82583966
出 版:现代生物医学进展杂志社
印 刷:哈尔滨市工大节能印刷厂
发 行:国内:哈尔滨市报刊发行局
国 外:中国国际图书贸易总公司
(北京 399 信箱,100044)
国外发行代号:Q1728
订 购:全国各地邮局
邮发代号:14-12
邮 购:现代生物医学进展编辑部
(150001 哈尔滨市 54 号信箱)
定 价:30.00 元 / 期,全年 720.00 元
中国标准刊号:ISSN 1673-6273
CN 23-1544/R
2019 年版权归现代生物医学进展杂志社所有
本刊刊出的所有文章不代表编委会的观点,
除非特别声明 本刊如有印刷质量问题,请向
现代生物医学进展杂志编辑部调换

目 次

·论 著·	
·基础研究·	
SIRT3 过表达通过调控细胞代谢转换抑制肾肿瘤细胞的增殖	
..... 刘 欢 陈宇凌 徐仁华等	(801)
Orexin 能神经元在依托咪脂麻醉中的促觉醒作用	
..... 张丽娜 肖东方 董海龙等	(807)
APP/PS1 年轻小鼠的早期学习记忆缺陷及血清注射治疗效果分析	
..... 朱 珊 黄亚楷 张伟民等	(811)
探讨 As ₂ O ₃ 诱导人胃癌 SGC-7901 细胞凋亡过程中 AKT 相关	
抗凋亡通路表达情况	
..... 马瑞金 韩 波 杨 宇等	(816)
早孕因子单克隆抗体对黑色素瘤细胞 A-375 增殖、凋亡的影响	
..... 吴文林 钟永怡 周 泉等	(820)
干预气道杯状细胞 CLCA 对 ARDS 小鼠损伤程度及炎症机制的影响	
..... 郭晓雅 宋立强 梁家宁等	(824)
四君子汤对溃疡性结肠炎小鼠模型 occludin 和 claudin-1 表达的影响	
..... 黄晓燕 郑超伟 罗莉川等	(829)
UPLC-HDMS 法测定大鼠灌胃栀子柏皮片后小檗碱与栀子苷	
的药代动力学	
..... 徐艳丽 蒲艳春 祝丽娣等	(834)
姜黄素对顺铂所致胃组织 ICC 损伤的保护作用及机制	
..... 姜少萍 于 晶 林 鹏等	(838)
大豆苷元增强多西紫杉醇体外杀伤三阴性乳腺癌作用研究	
..... 金 时 耿健雄 曹守波等	(842)
GATA4 基因 H435Y 位点突变对小鼠心功能的影响	
..... 方 涛 陈名武 张 慧等	(846)
·临床研究·	
经皮肝穿刺胆道引流术与逆行胰腺胆管造影术对结石性梗阻性	
黄疸患者的疗效比较研究	
..... 李 雪 孙玉明 龙云辉等	(851)

现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第19卷 第5期 2019年3月15日出版 Progress in Modern Biomedicine

还原型谷胱甘肽治疗儿童葡萄糖-6-磷酸脱氢酶缺乏症中的临床效果研究

..... 唐发娟 陈琳 张晓燕等 (855)

前列地尔联合尼莫地平对动脉瘤性蛛网膜下腔出血后脑血管痉挛患者血管内皮功能及

炎症因子水平的影响 沈杰 车雄宇 高亚宏等 (859)

体外反搏治疗小儿急性脑外伤的临床应用分析 陈秀华 唐亮 戴燕琼等 (864)

复方丹参滴丸联合曲美他嗪对冠心病合并高脂血症患者血液流变学及血脂的影响

..... 叶莎 金爱萍 高洁等 (868)

两种牙体充填材料对乳牙边缘微渗漏及固化效率的体外研究 冯芃 金星爱 吕晶等 (872)

游离龈移植术后龈瓣收缩效果的临床研究 万蕾蕾 马静雯 张纪春等 (876)

三阴性乳腺癌术后辅助化疗方案的药学研究 刘屹 丰航 许凡凡等 (880)

白细胞介素-1家族细胞因子水平与非酒精性脂肪性肝病及非酒精性脂肪性肝炎

病程进展的相关性分析 陈晓萌 高琰 王克迪等 (886)

宝石能谱CT评估冠状动脉介入治疗术后支架内成像质量的研究

..... 王利良 林朋 韦宏等 (890)

弹性成像定量分析联合硬环征在甲状腺良恶性结节鉴别诊断中的应用价值分析

..... 牛艳 周琦 李娜等 (894)

营养支持用于急性发作期慢性阻塞性肺疾病的效果研究 朱佳 延芳 王婷婷等 (899)

组织扩张器辅助神经内镜治疗高血压脑出血的临床应用价值分析

..... 陈磊 王翔毅 刘来兴等 (903)

厄贝沙坦对早期糖尿病肾病患者血清hs-CRP、TNF- α 、ET及Hcy水平的影响

..... 徐丽霞 常娟 秦纪平等 (907)

变应性鼻炎患者血清IL-17、IL-25及TNF- α 水平表达及与病情严重程度的关系研究

..... 黄榆岚 邓志华 高思敏等 (911)

唑来膦酸注射液联合骨肽注射液治疗绝经后骨质疏松症的临床疗效及安全性分析

..... 王玲 张新 白云等 (915)

依达拉奉联合红花黄色素对急性脑梗死患者神经功能、血脂水平及血液流变学的影响

..... 吴小英 陈坊园 张旭日等 (919)

针刺联合丙泊酚用于无痛结肠镜检查的可行性研究 罗彧钰 刘美娜 贾海霞等 (924)

胸膜腔黏连对非小细胞肺癌患者行胸腔镜下肺叶切除术的影响分析

..... 范晓东 陈召 陈静等 (928)

突发性耳聋患者焦虑抑郁状况及其影响因素分析 刘岩 田彦静 许尧生等 (933)

非药物分娩镇痛仪联合导乐陪伴分娩促进自然分娩的临床研究 苑媛 孙秋雨 王晓莹等 (938)

现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第19卷 第5期 2019年3月15日出版 Progress in Modern Biomedicine

生脉注射液联合曲美他嗪治疗缺血性心肌病合并肾功能不全的临床疗效分析

..... 杨宝刚 王庆凯 尹广利等 (942)

后腹腔镜下肾部分切除术对肾癌患者肾功能和预后的影响 白 冰 李宏召 母健君等 (946)

芪蛭三七汤治疗冠心病稳定型心绞痛气虚血瘀证的疗效及对

患者凝血功能和心功能的影响 苏学旭 仲秀艳 王劲红等 (951)

·生物医学教学·

TBL 教学模式与 TBL 联合 PBL 教学模式在骨科教学中的对比研究

..... 邱俊骏 王 强 赵 磊等 (956)

·技术与方法·

肿瘤亚型识别研究中智能算法的应用 程慧杰 陈 滨 刘芷余等 (960)

·专论与综述·

microRNAs 与流感病毒感染 张 森 户 义 李 靖等 (965)

活性氧簇在脑缺血 - 再灌注损伤中的损伤与保护作用 刘思亮 李 燕 于 巍等 (969)

烟碱抗阿尔茨海默病作用研究进展 程生博 帖金鑫 李 萌等 (975)

氨甲酰促红细胞生成素的神经保护作用及机制的研究进展 席召燕 段淑荣 陈 明等 (979)

非小细胞肺癌体部寡转移的立体定向放射治疗 燕相伟 马洪玉 刘雪莹等 (983)

国内外哮喘控制评价量表的研究进展与应用 陈采陶 陈艳焦 刘佳缘等 (987)

多核 ¹⁹F 磁共振成像研究进展 王楚南 申宝忠 吴丽娜等 (993)

靶向 TRPA1 通道的药物开发研究进展 梁珂维 王 康 蔡 芬等 (996)

·重要信息·

公示 (955)

《现代生物医学进展》2019 年封面设计说明 (898)

《现代生物医学进展》杂志简介及投稿指南 (I ~ IV)

责任编辑:王念、武海艳、郭晓东、李寿朋、王国华、陈文、田向荣、曾垂凯、陶维东、王沛坚、崔玉宝

英文编辑:田林杰、王娟、杨尚琴、李媛媛、吕志刚、马军、符波、朱杰、许愿忠、靳大川、岳颖、陈芸芸

执行编辑:谢建平、曾乐平、刘子馨、郑林丰、韩康、周利红、周颖、张玉环、董佩锋、朱英杰、万民熙

封面设计:曾乐平、彭安安

Progress in Modern Biomedicine

Established in April 2001

Volume 19 Number 5

March 15 2019

Responsible: The public Health Bureau of
Heilongjiang province
Sponsor: Heilongjiang Province Forestry General Hospital
The Fourth Hospital of Harbin Medical
University
Cosponsor: Harbin Institute of Technology
Shanghai Jiao Tong University
Affiliated First People's Hospital
Editing: Editorial Board of Progress in Modern
Biomedicine
No.32, Hexing Road, Harbin 150040
Tel:(0451) 82583800
<http://biomed.cnjournals.com>
<http://www.shengwuyixue.com>
<http://swcx.periodicals.net.cn>
E-mail: biomed_54@126.com
E-mail: liudhui_21@126.com
E-mail: biomagnetism@163.com
Academic Adviser: YANG Bao-feng
LIU Song-hao RUAN Chang-geng
ZENG Yi-tao HE Lin
FU Shi-ying WANG Nai-qian
LIU Yu-qing HAO Xi-shan
ZENG Yi-xin ZHANG Qi-fan
Editor-in-chief:
ZHAO Chang-jiu
Executive-Editor-in-chief:
WU Wen-zhong
Associate-Executive-Editor-in-chief:
MENG Qing-gang
Associate Editor-in-chief: LI Yu
ZHANG Gui-xiang HUANG Wen-hua
HUANG Ju-fang LIU Ping
LV huan-zhu ZENG Le-ping
TANG Yi-yuan ZENG Fan-yi
LIU Ming DAI Wen-jie
ZHANG Qing-yuan
Managing Director:
LIU Tong-kui
Managing Associate Director:
LIU Zi-xin XIE Jian-ping
ZHENG Lin-feng
Address of Editorial Deparment:
150001, Harbin No.54 Post-office box
(Room 403, No.184 at Huayuan Street, Harbin)
Tel: 0451-82583800 0451-53658268
Publishing: House, Journal of Progress in Modern
Biomedicine
Printing: Harbin city Gongda save energy
printing House
Overseas Distributor: China International
Book Trading corporation.
P.O Box 399, Beijing, code No.Q1728
Mail-Order: Editorial Department of publishing
House, Progress in Modern Biomedicine
Harbin 54 Post-office box, Harbin 150001
Tel: 0451-53658268 0451-82583800
CSSN: ISSN 1673-6273
CN 23-1544/R
Copyright 2019 by the publishing
House of Progress in Modern Biomedicine
All articles published represent the opinions of the
authors, do not reflect the official policy of the
Editorial Board of Progress in Modern Biomedicine
unless this is clearly specified.

Contents in Brief

ORIGINAL ARTICLES

·BASIC RESEARCH·

SIRT3 Overexpression Inhibits Growth of Kidney Tumor

Cells via Regulating Cellular Metabolic Transformation

LIU Huan, CHEN Yu-ling, XU Ren-hua, et al

..... (801)

The Role of Orexinergic Neurons in the Etomidate Anesthesia

ZHANG Li-na, XIAO Dong-fang, DONG Hai-long, et al

..... (807)

Serum Injection Rescues Learning and Memory Deficits

in APP/PS1 Young Mice

ZHU Shan, HUANG Ya-kai, ZHANG Wei-min, et al

..... (811)

Explore the AKT Related Anti-apoptotic Pathways Expression

in Arsenic Trioxide Induced Apoptosis of Human

Gastric Cancer SGC-7901 Cells

MA Rui-jin, HAN Bo, YANG Yu, et al

..... (816)

Effect of Monoclonal Antibody against Early Pregnancy Factor

on Proliferation and Apoptosis of Melanoma cell A-375

WU Wen-lin, ZHONG Yong-yi, ZHOU Quan, et al

..... (820)

Effects of Intervention Airway Goblet Cell CLCA on the Injury

Degree and Inflammatory Mechanism of ARDS mice

GUO Xiao-ya, SONG Li-qiang, LIANG Jia-ning, et al

..... (824)

Progress in Modern Biomedicine

Established in April 2001

Volume 19 Number 5

March 15 2019

Effect of Sijunzi Decoction on Occludin and Claudin-1 Expression in Ulcerative Colitis Mice Model	
HUANG Xiao-yan, ZHENG Chao-wei, LUO Li-chuan, et al	(829)
A Pharmacokinetic Study of Berberin and Gardenoside in Rats after Oral Administration of Zhi-Zi-Bai-Pi Tablet	
XU Yan-li, PU Yan-chun, ZHU Li-di, et al	(834)
Protective Effects and Mechanisms of Curcumin on the Damage of Cisplatin to ICC in Gastric Tissue	
JIANG Shao-ping, YU Jing, LIN Peng, et al	(838)
Effects of Daidzein Reverse Docetaxel Resistance by Regulating the Expression of BRCA1	
JIN Shi, GENG Jian-xiong, CAO Shou-bo, et al	(842)
Effect of GATA4 Gene H435Y Mutation on the Heart Function of Mice	
FANG Tao, CHEN Ming-wu, ZHANG Hui, et al	(846)
·CLINICAL RESEARCH·	
A Comparative Study of Percutaneous Transhepatic Biliary Drainage and Retrograde Cholangiopancreatography in the Treatment of Calculous Obstructive Jaundice	
LI Xue, SUN Yu-ming, LONG Yun-hui, et al	(851)
Clinical Study on the Efficacy of Reduced Glutathione in the Treatment of Children with Glucose-6-phosphate Dehydrogenase Deficiency	
TANG Fa-juan, CHEN Lin, ZHANG Xiao-yan, et al	(855)
Effects of Alprostadil and Nimodipine on Vascular Endothelial Function and Inflammatory Factors in Patients with Cerebral Vasospasm after Aneurysmal Subarachnoid Hemorrhage	
SHEN Jie, CHE Xiong-yu, GAO Ya-hong, et al	(859)
Clinical Application of External Counterpulsation in the Treatment of Acute Traumatic Brain Injury in Children	
CHEN Xiu-hua, TANG Liang, DAI Yan-qiong, et al	(864)
Effects of Compound Danshen Dripping Pills and Trimetazidine on the Hemorheology and Blood Lipid of Patients with Coronary Heart Disease Complicated with Hyperlipidemia	
YE Sha, JIN Ai-ping, GAO Jie, et al	(868)

Progress in Modern Biomedicine

Established in April 2001

Volume 19 Number 5

March 15 2019

Evaluation of Microleakage and Polymerization Efficiency in Primary Teeth with

Two Different Restorative Material

FENG Peng, JIN Xing-ai, LV Jing, et al (872)

Clinical Efficacy of Free Gingival Graft Shrinkage in the Treatment of Gingival Recession

WAN Lei-lei, MA Jing-wen, ZHANG Ji-chun, et al (876)

Pharmaceutical Research on Postoperative Adjuvant Chemotherapy for Three Patients

with Three Negative Breast Cancer

LIU Yi, FENG Hang, XU Fan-fan, et al (880)

Analysis of Correlation Between IL-1 Family Cytokines and Progression of NAFLD and NASH

CHEN Xiao-meng, GAO Yan, WANG Ke-di, et al (886)

Evaluation of Gemstone Energy Spectrum Computed Tomography for the In-stent Imaging

Quality after Percutaneous Coronary Intervention

WANG Li-liang, LIN Peng, WEI Hong, et al (890)

Analysis of the Application value of Elastography Quantitative Analysis Combined with Hard Ring

Sign for the Differential Diagnosis of Benign and Malignant Thyroid Nodules

NIU Yan, ZHOU Qi, LI Na, et al (894)

Effect of Nutrition Support on the Chronic Obstructive Pulmonary Disease in Acute Episode

ZHU Jia, YAN Fang, WANG Ting-ting, et al (899)

Clinical Value of Tissue Expander Assisted Neuroendoscopy for Hypertensive Intracerebral Hemorrhage

CHEN Lei, WANG Xiang-yi, LIU Lai-xing, et al (903)

Effect of Irbesartan on the Serum hs-CRP, TNF- α , ET and Hcy Levels of Patients with

Early Diabetic Nephropathy

XU Li-xia, CHANG Juan, QIN Ji-ping, et al (907)

Serum levels of IL-17, IL-25 and TNF- α in Patients with Allergic Rhinitis and their Relationship

with Severity of Illness

HUANG Yu-lan, DENG Zhi-hua, GAO Si-min, et al (911)

Progress in Modern Biomedicine

Established in April 2001

Volume 19 Number 5

March 15 2019

Clinical Efficacy and Safety of Zoledronic Acid Injection Combined with Bone Peptide Injection in the Treatment of Postmenopausal Osteoporosis

WANG Ling, ZHANG Xin, BAI Yun, et al (915)

Effects of Edaravone Combined with Safflower Yellow Pigment on Neurological Function, Blood Lipid Level and Hemorheology in Patients with Acute Cerebral Infarction

WU Xiao-ying, CHEN Fang-yuan, ZHANG Xu-ri, et al (919)

Feasibility of Combination of Acupuncture and Propofol for Painless Colonoscopy

LUO Yu-yu, LIU Mei-na, JIA Hai-xia, et al (924)

Effect of Pleural Adhesion on the Thoracoscopic Lobectomy in Patients with Non-small Cell Lung Cancer

FAN Xiao-dong, CHEN Zhao, CHEN Jing, et al (928)

Status of Anxiety and Depression and Its Influencing Factors in Patients with Sudden Deafness

LIU Yan, TIAN Yan-jing, XU Yao-sheng, et al (933)

A Clinical Study on the Non-drug Delivery Analgesics in Combination with Doula on the Facilitate Natural Delivery

YUAN Yuan, SUN Qiu-yu, WANG Xiao-ying, et al (938)

Analysis of the Clinical Efficacy of Shengmai Injection plus Trimetazidine in the Treatment of Ischemic Cardiomyopathy Combined with Renal Insufficiency

YANG Bao-gang, WANG Qing-kai, YIN Guang-li, et al (942)

Effect of Retroperitoneal Laparoscopic Partial Nephrectomy on Renal Function and Prognosis in Patients with Renal Cancer Cell Carcinoma

BAI Bing, LI Hong-zhao, MU Jian-jun, et al (946)

Effect of Astragalus Membranaceus-leech-pseudo-ginseng Soup in Treatment of Stable Angina Pectoris with Deficiency of Vital energy and Blood Stasis Syndrome

SU Xue-xu, ZHONG Xiu-yan, WANG Jin-hong, et al (951)

Progress in Modern Biomedicine

Established in April 2001

Volume 19 Number 5

March 15 2019

·BIOMEDICAL TEACHING·

Comparative Study of TBL Teaching Mode and TBL Combined with PBL Teaching Model
in Orthopedics Teaching

QIU Jun-jun, WANG Qiang, ZHAO Lei, et al (956)

·TECHNIQUES AND METHODS·

Application of An Intelligent Algorithm in Tumor Subtype Recognition

CHENG Hui-jie, CHEN Bin, LIU Zhi-yu, et al (960)

·MONOGRAPHS AND REVIEWS·

MicroRNAs and Influenza Virus Infection

ZHANG Sen, HU Yi, LI Jing, et al (965)

The Disruptive Effects and Protective Effects of Reactive Oxygen Species in Cerebral
Ischemia Reperfusion Injury

LIU Si-liang, LI Yan, YU Wei, et al (969)

Research Progress on the Effect of Nicotine against Alzheimer's Disease

CHENG Sheng-bo, TIE Jin-xin, LI Meng, et al (975)

Research Progress on the Neuroprotective Effect and Mechanism of Carbamylated Erythropoietin

XI Zhao-yan, DUAN Shu-rong, CHEN Ming, et al (979)

Treatment of Oligometastasis of Non-small Cell Lung Cancer by Stereotactic Body Radiation Therapy

YAN Xiang-wei, MA Hong-yu, LIU Xue-ying, et al (983)

The Worldwide Research Progress and Application of Asthma Control Assessment Scale

CHEN Cai-tao, CHEN Yan-jiao, LIU Jia-yuan, et al (987)

Advances in Multi - core ¹⁹F Magnetic Resonance Imaging

WANG Chu-nan, SHEN Bao-zhong, WU Li-na, et al (993)

Development and Research Progress of Drug Targeting TRPA1 Channel

LIANG Ke-wei, WANG Kang, CAI Fen, et al (996)



中国科技核心期刊

(中国科技论文统计源期刊)

收录证书

CERTIFICATE OF SOURCE JOURNAL
FOR CHINESE SCIENTIFIC AND TECHNICAL PAPERS AND CITATIONS

现代生物医学进展

经过多项学术指标综合评定及同行专家
评议推荐，贵刊被收录为“中国科技核心期
刊”(中国科技论文统计源期刊)。

特颁发此证书。



Institute of Scientific and Technical Information of China

北京复兴路 15 号 100038

www.istic.ac.cn

2018年11月

证书编号: 2017-F250-1814
有效期至: 2019年12月

