2022 年 1 月　第 41 卷　第 1 期
月刊
1982 年 7 月创刊

药　学　研　究
JOURNAL OF PHARMACEUTICAL RESEARCH

《药学研究》第十二届编辑委员会

学 术 顾 问: 陈凯先　管华诗　丁　健
岳建民

编 委 会 主 任: 李　涛

编委会副主任:（按姓氏笔画排序）
丁丽霞　王凤山　卢秀莲　田景振　杜冠华
李　波　李　燕　郑家晴　娄红祥　顾　宁

主　　编: 李　军

执行主编: 胡德福

编　　委:（按姓氏笔画排序）
丁　克　丁丽霞　于　沛　于荣敏　马　杰
马　国　王凤山　王永军　王戌梅　王建新
王荣梅　王淑敏　王　鹏　王　磊　尤启冬
方莲花　尹莉芳　邓仕任　龙亚秋　卢秀莲
卢　燕　卢　懿　田海妍　田景振　皮荣标
朱　平　朱冬青　乔善义　刘玉璇　刘继华
刘焕香　刘景根　刘新泳　齐宪荣　安　良
安林坤　许风国　许　婧　孙国祥　孙洪胜
严春艳　杜冠华　李　华　李孝栋　李芸霞
李宏建　李卓荣　李明玉　李　波　李　燕
杨永华　杨　柯　杨　勇　肖衍宇　吴亚林
吴　伟　吴艳芬　邱　峰　何祥久　何琪杨
何蓉蓉　余　蓉　沈　雁　张东明　张冬梅
张兰英　张庆英　张　杰　张岫美　张相林
张晓琦　张海英　张培成　张　翱　陈士林
陈卫民　陈艳芬　邵荣光　邵　蓉　范　源
罗海彬　岳建民　金少鸿　金　晶　周建平
郑忠辉　郑　彧　郑家晴　孟宪生　赵龙山
赵桂森　赵渤年　胡立宏　胡昌勤　胡金锋
柳　红　娄红祥　姚庆强　姚美村　夏　星
顾　宁　徐　伟　徐志南　徐　峻　凌沛学
高分飞　高　昊　郭远强　郭瑞臣　郭　颖
黄鸣清　黄容琴　盛　亮　寇俊萍　屠鹏飞
景　明　程　刚　傅俊杰　鲁　桂　曾　苏
游雪甫　窦明金　窦桂芳　臧恒昌

JOURNAL OF PHARMACEUTICAL RESEARCH

目　　次

·实验研究·

一氧化氮供体和阿霉素的共递送系统用于逆转肿瘤低氧耐药研究
…… 郑云茹,陈红,魏欣琪,褚克丹,徐伟,刘剑(1)

人参皂苷三醇型与二醇型在不同量比下对大鼠机体燥性的影响研究
…… 李金昱,宋成,张凡,曾菁菁,倪梦璐,郭雨欣,赵欣,孙明宇(9)

UHILIC-MS/MS 同时测定栝楼桂枝颗粒中 22 个氨基酸的含量
…… 蒋昆霞,朱美玲,王雅心,陈小婷,林羽,许文,徐伟(13)

不同产地玉竹中金属元素的水溶特性和含量特征研究
…… 刘月新,邹茜,袁园,廖颖妍(22)

黄蜀葵花不同开放程度对药材中总黄酮及其糖苷类成分含量及其提取率的影响 …… 郭小藤,刘燕,张清华,尚立霞(26)

·制剂研究·

草乌甲素可溶性微针的制备、质量评价及体外透皮性能研究
…… 李锐婷,李丽云,孙文强,丁江生(31)

·国家药监局重点实验室专栏·

氯吡格雷注射剂的研究进展
…… 王雪怡,孙平平,孙春萌,涂家生(37)

·综　　述·

聚糖在肿瘤转移、免疫调节和治疗中的特定作用
…… 聂笔爻,戴蓓英,杨勇,王琛(42)

槲皮素对阿尔茨海默病的作用机制研究新进展
…… 刘丽莹,孔荐,管清燕,杨晓云,杨晓(48)

“肺-肠轴”的研究进展
…… 张文杰,戴岳(53)

三七茎叶研究进展
…… 石萍萍,潘俊,李宏,刘秀徽,金鹏程,吴昕怡,田浩(57)

·药事管理·

互联网药品经营模式及现状浅析
…… 柳天启,赵彩虹,陈雨洁,唐行华(64)

·药品不良反应·

潮汕地区铂类抗肿瘤药物不良反应报告分析
…… 张浴玲,黄晓婷,陈晨,方翎(67)

期刊基本参数: CN37-1493/R * 1982 * m * A4 * 70 * zh * P * ￥10.00 * * 13 * 2022-01
本期责任编辑: 戴文婷

2022 January Volume 41 Number 1
Monthly
Founded in July, 1982

药 学 研 究
JOURNAL OF PHARMACEUTICAL RESEARCH

Academic Advisor: CHEN Kaixian GUAN Huashi
DING Jian YUE Jianmin
Director of Editorial Board: LI Tao
Associate Director of Editorial Board:
DING Lixia WANG Fengshan LU Xiulian
TIAN Jingzhen DU Guanhua LI Bo
LI Yan ZHENG Jiaqing LOU Hongxiang
GU Ning
Editor in Chief: LI Jun
Executive-Editor in Chief: HU Defu
Commissions:
DING Ke DING Lixia YU Pei
YU Rongmin MA Jie MA Guo
WANG Fengshan WANG Yongjun WANG Xumei
WANG Jianxin WANG Rongmei WANG Shumin
WANG Peng WANG Lei YOU Qidong
FANG Lianhua YIN Lifang DENG Shiren
LONG Yaqiu LU Xiulian LU Yan
LU Yi TIAN Haiyan TIAN Jingzhen
PI Rongbiao ZHU Ping ZHU Dongqing
QIAO Shanyi LIU Yuxuan LIU Jihua
LIU Huanxiang LIU Jinggen LIU Xinyong
QI Xianrong AN Liang AN Linkun
XU Fengguo XU Jing SUN Guoxiang
SUN Hongsheng YAN Chunyan DU Guanhua
LI Hua LI Xiaodong LI Yunxia
LI Hongjian LI Zhuorong LI Mingyu
LI Bo LI Yan YANG Yonghua
YANG Ke YANG Yong XIAO Yanyu
WU Yalin WU Wei WU Yanfen
QIU Feng HE Xiangjiu HE Qiyang
HE Rongrong YU Rong SHEN Yan
ZHANG Dongming ZHANG Dongmei ZHANG Lanying
ZHANG Qingying ZHANG Jie ZHANG Xiumei
ZHANG Xianglin ZHANG Xiaoqi ZHANG Haiying
ZHANG Peicheng ZHANG Ao CHEN Shilin
CHEN Weimin CHEN Yanfen SHAO Rongguang
SHAO Rong FAN Yuan LUO Haibin
YUE Jianmin JIN Shaohong JIN Jing
ZHOU Jianping ZHENG Zhonghui ZHENG YU
ZHENG Jiaqing MENG Xiansheng ZHAO Longshan
ZHAO Guisen ZHAO Bonian HU Lihong
HU Changqin HU Jinfeng LIU Hong
LOU Hongxiang YAO Qingqiang YAO Meicun
XIA Xing GU Ning XU Wei
XU Zhinan XU Jun LING Peixue
GAO Fenfei GAO Hao GUO Yuanqiang
GUO Ruichen GUO Ying HUANG Mingqing
HUANG Rongqin SHENG Liang KOU Junping
TU Pengfei JING Ming CHENG Gang
FU Junjie LU Gui ZENG Su
YOU Xuefu DOU Mingjin DOU Guifang
ZANG Hengchang

JOURNAL OF PHARMACEUTICAL RESEARCH

CONTENTS

Co-delivery system of nitric oxide donor and DOX for reversing hypoxia-induced drug resistance in tumor ····· *ZHENG Yunru, CHEN Hong, WEI Xinqi, CHU Kedan, XU Wei, LIU Jian*(1)

Study on the effect of ginsenoside triol type and glycol type on dryness of rats in different dosage ratios ····· *LI Jinyu, SONG Cheng, ZHANG Fan, ZENG Jingjing, NI Menglu, GUO Yuxin, ZHAO Xin, SUN Mingyu*(9)

Simultaneous determination of 22 amino acids in Gua Lou Gui Zhi Granules by UHILIC-MS/MS ····· *JIANG Kunxia, ZHU Meiling, WANG Yaxin, CHEN Xiaoting, LIN Yu, XU Wen, XU Wei*(13)

Study on content and dissolution characteristics of metal elements in *Polygonatum odoratum* from different producing areas ····· *LIU Yuexin, ZOU Qian, YUAN Yuan, LIAO Yingyan*(22)

Effects of different flowering degrees of *Abelmoschus manihot* on flavonoids and extraction rate ····· *GUO Xiaoteng, LIU Yan, ZHANG Qinghua, SHANG Lixia*(26)

Preparation, quality evaluation and in vitro transdermal properties of bulleyaconitine A dissolving microneedles ····· *LI Yueting, LI Liyun, SUN Wenqiang, DING Jiangsheng*(31)

Research progress of Clopidogrel Injections ····· *WANG Xueyi, SUN Pingping, SUN Chunmeng, TU Jiasheng*(37)

The specific role of glycan in tumor metastasis, immune regulation and treatment ····· *NIE Biyao, DAI Beiying, YANG Yong, WANG Chen*(42)

Research progress on the mechanism of quercetin on alzheimer's disease ····· *LIU Liying, KONG Jian, GUAN Qingyan, YANG Xiaoyun, YANG Xiao*(48)

Research advances of lung-gut axis ····· *ZHANG Wenjie, DAI Yue*(53)

Research advance on the stems and leaves of *Panax notoginseng* ····· *SHI Pingping, PAN Jun, LI Hong, LIU Xiuwei, JIN Pengcheng, WU Xinyi, TIAN Hao*(57)

Analysis of drug management mode and current situation on internet ····· *LIU Tianqi, ZHAO Caihong, CHEN Yujie, TANG Xinghua*(64)

Analysis on adverse reactions induced by platinum anti-tumor drugs in Chaoshan area ····· *ZHANG Yuling, HUANG Xiaoting, CHEN Chen, FANG Ling*(67)

Journal Primary Parameter: CN37-1493/R * 1982 * m * A4 * 70 * zh * P * ¥10.00 * * 13 * 2022-01