2023 年 11 月　第 42 卷　第 11 期
月刊
1982 年 7 月创刊

药　学　研　究
JOURNAL OF PHARMACEUTICAL RESEARCH

《药学研究》第十三届编辑委员会

学 术 顾 问:陈凯先　管华诗　丁　健
岳建民　顾　宁

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　杜冠华　李　波
李　燕　邱　峰　陈士林　邵　蓉　郑家晴
胡立宏　柳　红　娄红祥　姚庆强　屠鹏飞

主　编:王维剑

副主编:林永强　程春雷　魏　霞　孙　铜

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　王荣梅
王淑敏　王　鹏　王　磊　尤启冬　方莲花
尹莉芳　邓仕任　卢秀莲　卢　燕　卢　懿
田海妍　皮荣标　朱　平　朱冬青　乔善义
刘玉璇　刘安昌　刘继华　刘焕香　刘景根
刘新泳　齐宪荣　安林坤　许风国　许　婧
孙成鹏　孙国祥　严春艳　杜冠华　李　华
李孝栋　李芸霞　李卓荣　李明玉　李　波
李　燕　杨　柯　杨　勇　吴亚林　吴　伟
吴艳芬　邱　峰　何祥久　何琪杨　何蓉蓉
余　蓉　沈　雁　宋　超　张东明　张冬梅
张兰英　张　伟　张庆英　张　杰　张相林
张晓琦　张培成　张　海　张　翱　陈士林
陈艳芬　邵　蓉　范　源　罗海彬　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　维　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　徐　伟　徐志南
徐　峻　凌沛学　高分飞　高　昊　郭远强
郭志睿　郭　颖　唐　蕾　黄鸣清　黄容琴
盛　亮　寇俊萍　屠鹏飞　景　明　程　刚
傅俊杰　鲁　桂　温　清　游雪甫　窦明金
窦桂芳　蔡　圣　臧恒昌

JOURNAL OF PHARMACEUTICAL RESEARCH

目　次

·实验研究·

何首乌研究动态和发展趋势的 CiteSpace 知识图谱可视化分析 …… 周观琳,池鑫宇,陈泓,李绍燕,杨柯,曾春晖(849)

基于转录组学探讨白花蛇舌草总黄酮抗肺癌 A549 细胞生长机制 …… 罗悦,雒洪伟,姜星,王超,吴迎秋,张璐(857)

藏药三果汤治疗糖尿病作用机制的网络药理学与分子对接技术分析 …… 郭爽,刘海鹏,申隽于,李蓉,夏宗霄,龙小妹,范源(865)

基于能量代谢分析白藜芦醇对 H_2O_2 诱导 SH-SY5Y 细胞保护作用 …… 王淑静,黄冬梅,王立,谢雯(870)

多指标综合评价结合层次分析法优化黄芩微波酒制工艺 …… 李利华,王巍,张一美,赵梦辉,鞠成国(875)

秀丽斑叶兰的植物形态和显微鉴定 …… 梁秀婷,敖艳霞,陈慧玲,冯峰,吴岩斌,吴锦忠(881)

口服固体制剂粒度和粒度分布相关问题探讨 …… 何驰宇,朱雪萍,胡玉玺(884)

2010—2022 年地龙的研究热点及趋势的可视化分析 …… 王玲,张筱杉,张玉冬(891)

·国家药监局重点实验室专栏·

中和抗体检测应用于新型冠状病毒 mRNA 疫苗效力分析 …… 吴小红,赵丹华,所玥,彭沁华,王红玉,刘欣玉,李玉华(896)

17 种中药材中重金属污染分析与健康风险评估 …… 闫研,秦斌,梁雪,连少敏,王冰,王炳志,严义勇,殷果(902)

·综　　述·

基于巨噬细胞极化的肿瘤治疗 …… 顾佳丹,戴蓓英(909)

星形胶质细胞的免疫炎性反应和谷氨酸代谢异常在卒中后抑郁发病中的作用 …… 高倩,张明宽,陈志彬,刘晓语,胡明会,王新宇,张浩,李自发,耿希文,魏盛,武继彪(915)

超声空化技术在纳米乳剂制备中的应用进展 …… 吴迪,张汉文,夏江,刘思怡,张文君(921)

细胞膜色谱技术在多肽类成分筛选的研究进展 …… 孙铁锋,王平,丁相龙,丁立钧,姜其宝,王金国(926)

金荞麦化学成分、药理作用及临床应用研究概况 …… 赵婷,郭勇,邹妍,姜春宇,侯金才(932)

·药学教育·

学以致用:培养以职业岗位需求为导向的现代化炮制人才 …… 杨冰,于欣茗,王龙,封亮,贾晓斌(937)

·药品不良反应·

基于数据挖掘探讨补骨脂致肝损伤临床症候和防治 …… 王静宜,吕明月,殷佳,王信,刘慧,傅春升(943)

国际药物警戒系统评估指标研究进展 …… 刘丽,李莉,张涛,丁长玲(949)

《药学研究》关于抵制学术不端行为的声明 …… (864)

期刊基本参数:CN37-1493/R * 1982 * m * A4 * 104 * zh * P * ￥18.00 * * 18 * 2023-11
本期责任编辑:戴文婷

2023 November Volume 42 Number 11
Monthly
Founded in July, 1982

药 学 研 究
JOURNAL OF PHARMACEUTICAL RESEARCH

Academic Advisor: CHEN Kaixian GUAN Huashi
DING Jian YUE Jianmin
GU Ning

Director of Editorial Board: LI Tao

Associate Director of Editorial Board:

DING Lixia	WANG Fengshan	LU Xiulian
DU Guanhua	LI Bo	LI Yan
QIU Feng	CHEN Shilin	SHAO Rong
ZHENG Jiaqing	HU Lihong	LIU Hong
LOU Hongxiang	YAO Qingqiang	TU Pengfei

Editor-in-Chief: WANG Weijian

Associate Editors-in-Chief: LIN Yongqiang
CHENG Chunlei WEI Xia
SUN Tong

Members of Editoriol Board:

DING Ke	DING Lixia	YU Pei
YU Rongmin	MA Jie	MA Guo
WANG Fengshan	WANG Yongjun	WANG Xumei
WANG Rongmei	WANG Shumin	WANG Peng
WANG Lei	YOU Qidong	FANG Lianhua
YIN Lifang	DENG Shiren	LU Xiulian
LU Yan	LU Yi	TIAN Haiyan
PI Rongbiao	ZHU Ping	ZHU Dongqing
QIAO Shanyi	LIU Yuxuan	LIU Anchang
LIU Jihua	LIU Huanxiang	LIU Jinggen
LIU Xinyong	QI Xianrong	AN Linkun
XU Fengguo	XU Jing	SUN Chengpeng
SUN Guoxiang	YAN Chunyan	DU Guanhua
LI Hua	LI Xiaodong	LI Yunxia
LI Zhuorong	LI Mingyu	LI Bo
LI Yan	YANG Ke	YANG Yong
WU Yalin	WU Wei	WU Yanfen
QIU Feng	HE Xiangjiu	HE Qiyang
HE Rongrong	YU Rong	SHEN Yan
SONG Chao	ZHANG Dongming	ZHANG Dongmei
ZHANG Lanying	ZHANG Wei	ZHANG Qingying
ZHANG Jie	ZHANG Xianglin	ZHANG Xiaoqi
ZHANG Peicheng	ZHANG Hai	ZHANG Ao
CHEN Shilin	CHEN Yanfen	SHAO Rong
FAN Yuan	LUO Haibin	JIN Shaohong
JIN Jing	ZHOU Jianping	ZHENG Zhonghui
ZHENG Yu	ZHENG Jiaqing	MENG Xiansheng
ZHAO Longshan	ZHAO Guisen	ZHAO Wei
ZHAO Bonian	HU Lihong	HU Changqin
HU Jinfeng	LIU Hong	LOU Hongxiang
YAO Qingqiang	YAO Meicun	XIA Xing
XU Wei	XU Zhinan	XU Jun
LING Peixue	GAO Fenfei	GAO Hao
GUO Yuanqiang	GUO Zhirui	GUO Ying
TANG Lei	HUANG Mingqing	HUANG Rongqin
SHENG Liang	KOU Junping	TU Pengfei
JING Ming	CHENG Gang	FU Junjie
LU Gui	WEN Qing	YOU Xuefu
DOU Mingjin	DOU Guifang	CAI Sheng
ZANG Hengchang		

JOURNAL OF PHARMACEUTICAL RESEARCH

CONTENTS

Visualization and analysis of research trends and development of *Polygoni Multiflori Radix* based on CiteSpace knowledge map ····· *ZHOU Guanlin, CHI Xinyu, CHEN Hong, LI Shaoyan, YANG Ke, ZENG Chunhui* (849)

Transcriptomic study of total flavonoids of *Hedyotis diffusa* Willd.against the growth of lung cancer cells ····· *LUO Yue, LUO Hongwei, JIANG Xing, WANG Chao, WU Yingqiu, ZHANG Lu* (857)

Study on the mechanism of tibetan medicine Triphala in treating diabetes based on network pharmacology and molecular docking technology ····· *GUO Shuang, LIU Haipeng, SHEN Junyu, LI Rong, XIA Zongxiao, LONG Xiaomei, FAN Yuan* (865)

Study the protective effect of resveratrol on H_2O_2-induced SH-SY5Y cells based on energy metabolism ····· *WANG Shujing, HUANG Dongmei, WANG Li , XIE Wen* (870)

Optimizing the process of *Scutellaria baicalensis* microwave wine production by multi-index comprehensive evaluation combined with hierarchical analysis method ····· *LI Lihua, WANG Wei, ZHANG Yimei, ZHAO Menghui, JU Chengguo* (875)

Morphological and microscopic identification of *Goodyera vittate* ····· *LIANG Xiuting, AO Yanxia, CHEN Huiling, FENG Feng, WU Yanbin, WU Jinzhong* (881)

Discussion on issues related to particle size and its distribution of oral solid preparation ····· *HE Chiyu, ZHU Xueping, HU Yuxi* (884)

Visual analysis of research hotspots and trends of *Pheretima* from 2010 to 2022 ····· *WANG Ling, ZHANG Xiaoshan, ZHANG Yudong* (891)

Study on the potency of mRNA COVID-19 vaccine in vivo using neutralizing antibody assay ··· *WU Xiaohong, ZHAO Danhua, SUO Yue, PENG Qinhua, WANG Hongyu, LIU Xinyu, LI Yuhua* (896)

Pollution analysis and health risk assessment of heavy metals in seventeen kinds of Chinese medicinal materials ····· *YAN Yan, QIN Bin, LIANG Xue, LIAN Shaomin, WANG Bing, WANG Bingzhi, YAN Yiyong, YIN Guo* (902)

Anti-tumor therapies based on macrophages′ repolarization ····· *GU Jiadan, DAI Beiying* (912)

The role of astrocyte immune inflammatory response and abnormal glutamate metabolism in the pathogenesis of post-stroke depression ··· *GAO Qian, ZHANG Mingkuan, CHEN Zhibin, LIU Xiaoyu, HU Minghui, WANG Xinyu, ZHANG Hao, LI Zifa, GENG Xiwen, WEI Sheng, WU Jibiao* (915)

Application progress of ultrasonic cavitation technology in the preparation of nano-emulsion ····· *WU Di, ZHANG Hanwen, XIA Jiang, LIU Siyi, ZHANG Wenjun* (921)

Research progress of cell membrane chromatography in screening active components of polypeptides ····· *SUN Tiefeng, WANG Ping, DING Xianglong, DING Lijun, JIANG Qibao, WANG Jinguo* (926)

Overview of chemical constituents, pharmacological effects and clinical application of *Fagopyrum dibotrys* ····· *ZHAO Ting, GUO Yong, ZOU Yan, JIANG Chunyu, HOU Jincai* (932)

Learning for practice: cultivating modern processing talents oriented by occupational demand ····· *YANG Bing, YU Xinming, WANG Long, FENG Liang, JIA Xiaobin* (937)

Clinical symptoms and treatment of *Psoralen* induced liver injury based on data mining ····· *WANG Jingyi, LYU Mingyue, YIN Jia, WANG Xin, LIU Hui, FU Chunsheng* (943)

Research progress on evaluation indicators of international pharmacovigilance system ····· *LIU Li, LI Li, ZHANG Tao, DING Changling* (949)

Journal Primary Parameter: CN37-1493/R * 1982 * m * A4 * 104 * zh * P * ￥18.00 * * 18 * 2023-11