

特别关注：

基于Nrf2/BNIP3信号通路探讨苓桂术甘汤含药血清对心肌细胞线粒体氧化应激的影响

苓桂术甘汤出自汉代张仲景《伤寒杂病论》，主治心脾阳虚、饮停气逆之

治疗心力衰竭的有效方药。氧化应激是心力衰竭发生发展的重要启动机制



QK2231173
JOURNAL OF CHINESE PHARMACEUTICAL ASSOCIATION

疗可有效抑制心力衰竭的发展。文章基于苓桂术甘汤的抗氧化应激作用，以H9c2心肌细胞为研究对象，探讨苓桂术甘汤抗氧化应激的内在分子机制，进一步阐明苓桂术甘汤防治心力衰竭的作用机制。

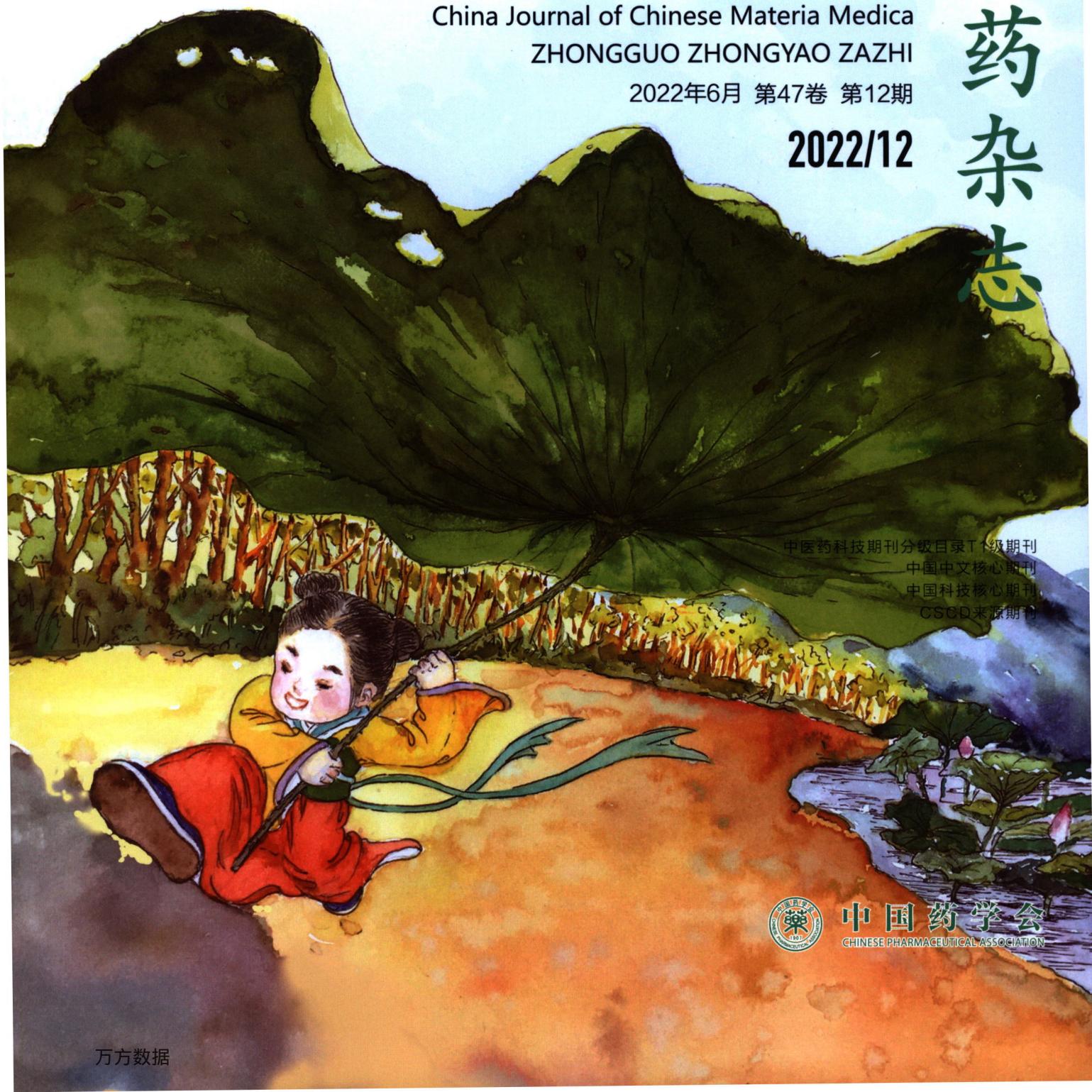
China Journal of Chinese Materia Medica
ZHONGGUO ZHONGYAO ZAZHI

2022年6月 第47卷 第12期

2022/12

中国
中
药
杂
志

中医药科技期刊分级目录T1级期刊
中国中文核心期刊
中国科技核心期刊
CSCD来源期刊



中国药学会
CHINESE PHARMACEUTICAL ASSOCIATION



目 次

·中医药卫生技术评估专题·

- 快速卫生技术评估的概况性综述
李苗苗, 吴雪, 徐思敏, 戴泽琦, 赵晖, 廖星 (3125)
- 国内外医院卫生技术评估的概况性综述
徐思敏, 戴泽琦, 吴雪, 李苗苗, 廖星 (3136)
- 4种口服中成药治疗便秘的快速卫生技术评估
李苗苗, 赵晖, 戴泽琦, 吴雪, 徐思敏, 唐旭东, 廖星 (3144)
- 多准则决策分析用于中成药临床综合评价的建议
戴泽琦, 徐思敏, 吴雪, 李苗苗, 胡晶, 廖星 (3155)
- WHO指导手册对中医药卫生技术评估机制制度化建设的启示
戴泽琦, 吴雪, 徐思敏, 李苗苗, 赵晖, 廖星 (3161)

·综述·

- 中药液体制剂的剂型设计关键技术:组分的溶解性质与增溶技术应用
叶亮, 熊志伟, 孙娥, 吴葳, 姜梦华, 黄斌, 赵菁, 封亮, 刘俊, 贾晓斌 (3166)

·资源与鉴定·

- 基于 UPLC-Q-TOF-MS 代谢组学技术的枳壳适宜采收期研究
王慧, 黄友荪, 梁燕青, 张昕宇, 谢欢, 张寿文 (3175)
- 虎杖叶斑病病原菌的鉴定、生物学特性及其有效杀菌剂研究
刘自华, 张泽志, 苗玉焕, 朱成姗, 刘大会, 陈运中, 刘义梅 (3185)
- 雌雄地鳖虫在品质及营养成分差异研究
常淮阳, 史红专, 邹洁, 王昇, 郭丽媛, 刘水新 (3192)

·分子生药学·

- 地黄内生真菌 GG22 侵染下 miR160 家族成员及靶基因的鉴定分析
许娅, 赵乐, 董诚明, 朱昀昊 (3198)
- 甜橙中 UDP-鼠李糖合成酶基因 *CsRHM* 的克隆与鉴定
于宛彤, 侯康鑫, 苏新亮, 张晓丽, 邱杰, 王彩霞, 薛强, 刘金龙 (3208)

·制剂与炮制·

- 牡丹皮组分抑制“毒损因子 AGEs”生成的作用及机制研究
李杰, 陈婷婷, 孙楠楠, 杨冰, 张梦桃, 尹诗雨, 张朱棋, 张少婵, 贾晓斌, 封亮 (3215)
- 基于水动力学尺寸调控盐酸小檗碱和葡聚糖二元体系喷干粉的表面组分有序分布
韩星星, 孟治平, 陈轩宇, 邓小敏, 梁银妹, 马欣艾, 谢建君, 付廷明 (3224)
- D-最优混料设计法优化刺五加总苷微乳制备工艺及肠吸收特性研究
张宇航, 高寒, 徐伟, 邱智东, 贾艾玲 (3233)
- UPLC-MS/MS 同时测定大鼠脑微透析样品中 11 个神经递质含量
潘凌云, 王雨, 刘新华, 贾益群 (3242)

桑白皮、炒桑白皮及其标准汤剂的质量评价方法及质量传递规律研究 郝丽霞, 焦其树, 秦雪梅, 代云桃, 石宗鑫, 黄程成	(3251)
·化学·	
石榴花可水解单宁及抗糖尿病活性研究 喻奕虎, 贾丽, 曾慧婷, 袁涛	(3258)
附子中1个新的苯基异喹啉生物碱及其心肌保护活性 刘杰, 林巧, 周勤梅, 蒙春旺, 熊亮, 王晓雅, 缪璐琳, 郭力, 彭成	(3265)
莪术治疗冠心病的物质基础及作用机制预测研究 费程浩, 童黄锦, 李昱, 徐桢, 秦宇雯, 卞振华, 苏联麟, 季德, 陆兔林, 毛春芹	(3270)
一测多评法同时测定辣木叶中硫苷及黄酮类成分的含量 张明晚, 李化, 陈娜, 向俊洁, 林路洁, 李志勇, 杨滨	(3285)
基于谱效关系的藁本类药材抗炎活性成分研究 刘久石, 张小艺, 李斌, 魏雪革, 齐耀东, 刘海涛, 张本刚	(3295)
·药理·	
基于 Nrf2/BNIP3 信号通路探讨苓桂术甘汤含药血清对心肌细胞线粒体氧化应激的影响 汤同娟, 王翔, 周鹏, 王靓, 施慧, 黄金玲	(3303)
芍药苷抑制 SENP1/c-Myc 信号通路诱导急性 B 淋巴细胞白血病细胞的凋亡和周期阻滞 覃祥, 陈曦, 刘静, 曾艳, 郭铃, 刘文君	(3312)
丹葵片降低 db/db 小鼠肝脏脂肪生成及炎症反应改善胰岛素抵抗的作用研究 庞雅芬, 黄明, 李琳, 赵鑫, 张红霞, 李玉红	(3320)
葛根芩连汤对胰岛素抵抗大鼠脂肪组织 Scd1 基因甲基化与表达的影响及甲基化与生理生化指标相关性分析 彭淑红, 龚淑芳, 陈永强, 杨佳成, 曾伟红, 曾治君, 徐国良, 刘欣宜, 朱卫丰, 姚鹏程	(3328)
基于网络药理学与分子对接技术探讨滋脾饮治疗糖尿病肾病的作用机制 高利东, 刘佳, 黄宇虹, 王保和	(3339)
基于网络药理学和实验验证远志-石菖蒲药对治疗阿尔茨海默病的作用机制 苏世杰, 陈依, 杨虹颖, 刘惠娜, 韩露, 王宏, 李伟荣, 王奇	(3348)
基于 HPLC 探讨升降散通过 IL-6/JAK2/STAT3 信号通路对 EAE 小鼠的防治作用 吕保江, 郑泽泉, 郑可男, 吴璐璐, 许浩游, 童培珍, 吴文平, 吴智兵, 招远祺	(3361)
风轮菜总提取物、总皂苷和总黄酮对子宫异常出血大鼠抗炎止血作用机制研究 李丽丽, 黄琪, 彭代银, 齐佳佳, 姚敏	(3372)
基于序贯分析策略的双黄连注射液与注射用氨苄西林钠联合用药合理性评价 许杨, 李江玲, 刘爽, 王真真, 黄明月, 王爱婷, 刘贤武, 郭丹	(3380)
川蛭通络胶囊通过抑制神经炎症和氧化应激治疗小鼠脑缺血再灌注损伤 库亚萍, 张丽, 李冰, 孙敬侠, 范建伟, 张贵民	(3386)
·药事管理·	
草药/植物药专论在中药国际注册中的重要性研究 杨洋, 赵胜楠, 张笑天, 孙佳玮, 白剑, 杨龙会	(3392)
·学术探讨·	
排卵障碍性疾病“异病同治”：“天癸”本质及与排卵障碍性疾病关系的探讨 刘晓倩, 马莹, 杨斌, 张晓雨, 尹昀东	(3397)
中药制药工艺知识库构建方法研究 薛启隆, 王肇璇, 苗坤宏, 李小丁, 于洋, 李正	(3402)

本期责任编辑:陈玲



CONTENTS IN BRIEF

Scoping review of rapid health technology assessment

LI Miao-miao, WU Xue, XU Si-min, DAI Ze-qi, ZHAO Hui, LIAO Xing (3125)

Scoping review of domestic and overseas hospital-based health technology assessment

XU Si-min, DAI Ze-qi, WU Xue, LI Miao-miao, LIAO Xing (3136)

Rapid health technology assessment of four oral Chinese patent medicines for constipation

LI Miao-miao, ZHAO Hui, DAI Ze-qi, WU Xue, XU Si-min, TANG Xu-dong, LIAO Xing (3144)

Multi-criteria decision analysis in clinical comprehensive evaluation of Chinese patent medicine

DAI Ze-qi, XU Si-min, WU Xue, LI Miao-miao, HU Jing, LIAO Xing (3155)

Enlightenment of WHO guideline on institutionalizing health technology assessment mechanism for traditional Chinese medicine

DAI Ze-qi, WU Xue, XU Si-min, LI Miao-miao, ZHAO Hui, LIAO Xing (3161)

Key technologies in dosage form design of Chinese medicinal liquid preparations: application of component solubility and solubilization technology

YE Liang, XIONG Zhi-wei, SUN E, WU Wei, JIANG Meng-hua, HUANG Bin, ZHAO Jing, FENG Liang, LIU Jun, JIA Xiao-bin (3166)

Suitable harvest period of Aurantii Fructus based on UPLC-Q-TOF-MS metabolomics

WANG Hui, HUANG You-sun, LIANG Yan-qing, ZHANG Xin-yu, XIE Huan, ZHANG Shou-wen (3175)

Identification, biological characteristics, and screening of effective fungicides of *Phoma rhei* causing leaf spot on *Polygonum cuspidatum*

LIU Zi-hua, ZHANG Ze-zhi, MIAO Yu-huan, ZHU Cheng-shan, LIU Da-hui, CHEN Yun-zhong, LIU Yi-mei (3185)

Comparison of internal quality and nutrients between male and female *Eupolyphaga sinensis*

CHANG Huai-yang, SHI Hong-zhuan, ZOU Jie, WANG Yi, GUO Li-yuan, LIU Shui-xin (3192)

Identification of miR160 family and their target genes in *Rehmannia glutinosa* in response to endophytic fungus GG22 infection

XU Jiao, ZHAO Le, DONG Cheng-ming, ZHU Yun-hao (3198)

Cloning and expression analysis of UDP-rhamnose synthase from *Citrus sinensis*

YU Wan-tong, HOU Kang-xin, SU Xin-yao, ZHANG Xiao-li, QIU Jie, WANG Cai-xia, XUE Qiang, LIU Jin-long (3208)

Role and mechanism of Cortex Moutan components in inhibiting production of toxic advanced glycation end products (AGEs)

LI Jie, CHEN Ting-ting, SUN Nan-nan, YANG Bing, ZHANG Meng-tao, YIN Shi-yu, ZHANG Zhu-bin, ZHANG Shao-chan, JIA Xiao-bin, FENG Liang (3215)

Distribution of surface components in spray-dried powder of binary system of berberine hydrochloride and dextran based on hydrodynamic size

HAN Xing-xing, MENG Zhi-ping, CHEN Xuan-yu, DENG Xiao-min, LIANG Yin-mei, MA Xin-ai, XIE Jian-jun, FU Ting-ming (3224)

Optimization of preparation technology for *Acanthopanax senticosus* total saponins microemulsion by D-optimal mixture design and intestinal absorption characteristics

ZHANG Yu-hang, GAO Han, XU Wei, QIU Zhi-dong, JIA Ai-ling (3233)

Simultaneous determination of 11 neurotransmitters in brain microdialysis samples from rats by UPLC-MS/MS

PAN Ling-yun, WANG Yu, LIU Xin-hua, JIA Yi-qun (3242)

Quality evaluation methods and quality transfer law of Mori Cortex, fried Mori Cortex and its standard decoction	
HAO Li-xia, JIAO Qi-shu, QIN Xue-mei, DAI Yun-tao, SHI Zong-xin, HUANG Cheng-cheng	(3251)
Hydrolyzable tannins from flowers of <i>Punica granatum</i> and their anti-diabetic activities	
YU Yi-hu, JIA Li, ZENG Hui-ting, YUAN Tao	(3258)
A novel phenylisoquinoline alkaloid with cardioprotective effect from Aconiti Lateralis Radix Praeparata	
LIU Jie, LIN Qiao, ZHOU Qin-mei, MENG Chun-wang, XIONG Liang, WANG Xiao-ya, MIAO Lu-lin, GUO Li, PENG Cheng	(3265)
Prediction of material basis and mechanism of Curcumae Rhizoma in treatment of coronary heart disease	
FEI Cheng-hao, TONG Huang-jin, LI Yu, XU Zhen, QIN Yu-wen, BIAN Zhen-hua, SU Lian-lin, JI De, LU Tu-lin, MAO Chun-qin	(3270)
Simultaneous determination of glucosinolates and flavonoids in leaves of <i>Moringa oleifera</i> by quantitative analysis of multi-components by single-marker (QAMS)	
ZHANG Ming-xiao, LI Hua, CHEN Na, XIANG Jun-jie, LIN Lu-jie, LI Zhi-yong, YANG Bin	(3285)
Anti-inflammatory active component in raw materials of Ligustici Rhizoma et Radix based on spectrum-effect relationship	
LIU Jiu-shi, ZHANG Xiao-yi, LI Bin, WEI Xue-ping, QI Yao-dong, LIU Hai-tao, ZHANG Ben-gang	(3295)
Effect of Linggui Zhugan Decoction-containing serum on mitochondrial oxidative stress in cardiomyocytes: an exploration based on Nrf2/BNIP3 signaling pathway	
TANG Tong-juan, WANG Xiang, ZHOU Peng, WANG Liang, SHI Hui, HUANG Jin-ling	(3303)
Paeoniflorin induces apoptosis and cycle arrest in B-cell acute lymphoblastic leukemia cells by inhibiting SENP1/c-Myc signaling pathway	
QIN Xiang, CHEN Xi, LIU Jing, ZENG Yan, GUO Ling, LIU Wen-jun	(3312)
Effect of Danlou Tablets on alleviating hepatic adipogenesis, inflammatory response, and insulin resistance in db/db mice	
PANG Ya-fen, HUANG Ming, LI Lin, ZHAO Xin, ZHANG Hong-xia, LI Yu-hong	(3320)
Effect of Gegen Qinlian Decoction on methylation and expression of Scd1 gene in adipose tissue of insulin resistant rats and correlations between methylation and physiological and biochemical parameters	
PENG Shu-hong, GONG Shu-fang, CHEN Yong-qiang, YANG Jia-cheng, ZENG Wei-hong, ZENG Zhi-jun, XU Guo-liang, LIU Xin-yi, ZHU Wei-feng, YAO Peng-cheng	(3328)
Mechanism of Zicui Decoction in treatment of diabetic kidney disease based on network pharmacology and molecular docking	
GAO Li-dong, LIU Jia, HUANG Yu-hong, WANG Bao-he	(3339)
Exploration on mechanism of Polygalae Radix and Acori Tatarinowii Rhizoma in treating Alzheimer's disease based on network pharmacology and experimental verification	
SU Shi-jie, CHEN Yi, YANG Hong-ying, LIU Hui-na, HAN Lu, WANG Hong, LI Wei-rong, WANG Qi	(3348)
Therapeutic effect of Shengjiang Powder on experimental autoimmune encephalomyelitis mice through IL-6/JAK2/STAT3 signaling pathway: based on HPLC	
LYU Bao-jiang, ZHENG Ze-quan, ZHENG Ke-nan, WU Lu-lu, XU Hao-you, TONG Pei-zhen, WU Wen-ping, WU Zhi-bing, ZHAO Yuan-qi	(3361)
Anti-inflammatory and hemostatic effects of total extract, saponins, and flavonoids of <i>Clinopodium chinense</i> in female rats with abnormal uterine bleeding and mechanism	
LI Li-li, HUANG Qi, PENG Dai-yin, QI Jia-jia, YAO Min	(3372)
Rationality evaluation of Shuanghuanglian Injection combined with Ampicillin Sodium for Injection based on sequential analysis	
XU Yang, LI Jiang-ling, LIU Shuang, WANG Zhen-zhen, HUANG Ming-yue, WANG Ai-ting, LIU Xian-wu, YAN Dan	(3380)
Chuanzhi Tongluo Capsules antagonizes cerebral ischemia-reperfusion injury in mice by inhibiting neuroinflammation and oxidative stress	
KU Ya-ping, ZHANG Li, LI Bing, SUN Jing-xia, FAN Jian-wei, ZHANG Gui-min	(3386)
Significance of herbal/botanical monograph in international registration of Chinese medicine	
YANG Yang, ZHAO Sheng-nan, ZHANG Xiao-tian, SUN Jia-wei, BAI Jian, YANG Long-hui	(3392)
Ovulatory disorders under "common therapeutic principle for different diseases": essence of "Tiangui" and relationship with ovulation disorders	
LIU Xiao-qian, MA Kun, YANG Bin, ZHANG Xiao-yu, YIN Yun-dong	(3397)
Construction of knowledge base of Chinese medicine manufacturing	
XUE Qi-long, WANG Bei-xuan, MIAO Kun-hong, LI Xiao-ding, YU Yang, LI Zheng	(3402)

主 编 张伯礼
主 管 中国科学技术协会
主 办 中国药学会
编 辑 出 版 中国中药杂志编辑部
地 址 北京市东直门内南小街16号
邮 编 100700
电 话 (010) 64087589
邮 箱 cjcmm2006@188.com
网 址 http://www.cjcmm.com.cn
图 文 制 作 同方知网(北京)技术有限公司
印 刷 山西同方知网印刷有限公司
订 阅 发 行 同方知网(北京)技术有限公司
出 版 日 期 2022年6月15日
国 际 标 准 连 续 出 版 物 号 ISSN 1001-5302
国 内 统 一 连 续 出 版 物 号 CN 11-2272/R
国 内 定 价 每期50元, 全年1200元

ZHONGGUO ZHONGYAO ZAZHI

第47卷 第12期
Vol. 47 No. 12

2022/12

中 国 中 药 杂 志

CHINA JOURNAL OF CHINESE MATERIA MEDICA

Editor-in-Chief

ZHANG Bo-li

Responsible Institution

China Association for Science and Technology

Sponsored by

Chinese Pharmaceutical Association

Edited and Published by

Editorial Office of China Journal of Chinese Materia Medica

Address: 16 Nanxiaojie, Inner Dongzhimen Beijing 100700, China

Tel: 86-10-64087589

E-mail: cjcmm2006@188.com

http://www.cjcmm.com.cn

Graphics produced by

Tongfang Knowledge Network Technology Co., Ltd. (Beijing)

Printed by

Shanxi Tongfang Knowledge Network Printing Co., Ltd.

Overseas Distributor

Tongfang Knowledge Network Technology Co., Ltd. (Beijing)

Publication Date

June 15, 2022

ISSN 1001-5302 CN 11-2272/R

ISSN 1001-5302



9 771001 530223

国内定价: 50.00元