

《科技导报》2024年第42卷总目次

(括号外数字为期号, 括号内数字为该期起始页码)

卷首语

- 以科技创新开辟发展新领域新赛道 包为民1(1)
- 以全球视野谋划和推动开源RISC-V生态发展 倪光南2(1)
- 开创共建、共享、共治的城市交通治理新格局 韩林飞3(1)
- 开创中国核能现代化发展 叶奇蓁4(1)
- 提升战略性关键矿产资源保障能力, 把握全球矿产资源格局 翟明国5(1)
- 从抢占科技制高点看中国式现代化之路 王赤6(1)
- 政策引领创新驱动, 积极稳妥推进实现碳中和目标 侯立安7(1)
- 关于新时代创新创造的思考 路甬祥8(1)
- 加速发展地球系统科学, 为人类社会可持续发展提供科学支撑 符淙斌9(1)
- 浅议科学与哲学 杜祥琬10(1)
- 科技赋能新污染物治理, 创新保障人民饮水健康 侯立安11(1)
- 以基础研究和大科学设施助推新质生产力发展 王贻芳12(1)
- 加快智慧海洋建设, 推进人工智能对海洋工程装备的变革 吴有生13(1)
- 中国水下考古取得跨越式发展 金翔龙14(1)
- 绿色氢能能在“双碳”战略中的作用 李灿15(1)
- 加快推动废塑料化学循环, 有效应对塑料污染 李景虹16(1)
- 当代粒子物理的主旋律——希格斯粒子 王贻芳17(1)
- 切实推进和长期坚持跨省市“科教融合” 杨文采18(1)
- 减灾降碳并举, 应对极端气候 李家春19(1)
- 努力提升人居环境品质 吴硕贤20(1)
- 守正创新时代的中医药真实世界研究 全小林21(1)
- 用多体系统发射动力学创新提升国防科技工业研发能力和装备性能 芮筱亭22(1)
- 加强科技机构组织建设, 促进创新性科技成果涌现 许健民23(1)

专稿

- 加强高校有组织科研, 支撑高水平科技自立自强 李景虹24(1)
- 2023年中国重大科学、技术和工程进展 王康友, 徐丽娇, 王志敏, 祝叶华1(7)
- 美国国防高级研究计划局2014—2023财年预算的启示 王钊, 李文娟, 王强2(6)
- 中国氢能交通产业的现状、挑战与展望 孟翔宇, 顾阿伦, 曾静, 陈铭韵, 周剑, 刘滨, 毛宗强3(6)
- 美国能源可持续利用现状及对中国的启示 胡健, Wu Sheng, 邓西里, 孙海涛, 崔景伟, 赵路正4(6)
- 中国战略性关键矿产勘查开发进展与新一轮找矿的建议 王登红, 代鸿章, 刘善宝, 王成辉, 于扬, 赵芝5(7)
- 关于中国空间科技现代化发展的初步思考 王赤, 宋婷婷, 时蓬, 范全林6(6)
- 现代科学与传统文化 汪品先6(16)
- 面向绿色发展的碳中和政策创新与发展 白雨露, 董战峰7(6)
- 从人机交互到人机共协计算——人机关系的思想演化和未来展望 王晨, 任向实8(6)
- 智能电网的网络安全风险及应对策略 岳芳, 王雪珍, 姜山9(6)
- “两弹元勋”邓稼先: 践行科学家精神的典范 李建强, 许进10(6)
- 河湖水体新污染物赋存特征、去除技术及防控对策 王斌, 李文嘉, 王涛, 李江, 许晓毅, 张林, 侯立安11(6)
- 中国新能源汽车未来10年周期性和结构性趋势展望 欧阳明高12(6)
- 深水油气平台水下结构运维机器人技术进展 姜哲, 赵宇, 黄建虾, 王芳, 陈祎, 罗传坤, 罗高生13(6)
- 2023年光学热点回眸 谢兴龙, 李昕然, 童妙妍, 朱健强14(5)
- 地球内部可能利用的天然氢气 杨文采15(7)
- 中国粮食安全治理的特征及路径 周琳, 钟钰16(6)
- 卓越工程师的能力素质和成长路径——基于“国家工程师奖”表彰对象

- 样本的画像分析 刘雅琦, 韩思嘉, 白麒麟17(7)
- 欧洲守望者号日地L5点空间天气卫星布局进展及启示 王赤, 李明, 魏海燕, 时蓬, 罗冰昱, 范全林17(16)
- 膜法盐湖提锂技术研发进展 邓子祺, 程荣, 石磊, 郑祥18(5)
- 2024年诺贝尔物理学奖和化学奖为何偏爱人工智能 李国杰19(6)
- 新型镍氧超导体的理论研究 姚道新20(6)
- 智能科研范式推进中医药高质量、高效发展 刘保廷21(6)
- 衰老机制与干预研究进展 李静宜, 范艳玲, 黄皓琰, 张译元, 刘蓓蓓, 刘光慧22(6)
- 世界核能科技发展前沿进展 杨军, 孙培杰, 彭翠婷, 胡梦岩, 黄茜, 张祎轩, 黄宇航, 罗志鹏, 徐乐瑾23(7)
- 松辽盆地白垩系古龙页岩由“生油”到“产油”的革命性转变及战略意义 白斌, 李国欣, 白雪峰, 朱如凯, 崔宝文, 雷征东, 孟思炜, 何坤, 刘合24(5)

科技工作者建议

- 推动中国开源软硬件发展的经验与建议 郭滕达, 张明喜2(14)
- 美国国家研究理事会的咨询选题与组织机制 孟鸿飞, 王劲波, 白光祖, 陈春, 王强, 李燕, 王唯滢3(27)
- 美国芯片补贴“护栏条款”对中国的影响及应对建议 丁如17(28)
- 服务型老年公寓的国际发展态势及启发 周燕珉, 郑远伟17(41)
- 日本科研人员的激励机制与特点 徐爽, 吴金希23(31)
- 创新链与产业链融合发展 焦德涵, 卢春房, 蔡超勋, 马成贤24(13)
- 大国博弈背景下美国关键矿产供应链安全态势及其启示 王钊, 李莹, 刘萍萍24(21)

专题

- 2023年原子核物理科技热点回眸 马余刚1(30)
- 2023年超材料热点回眸

..... 周济,于相龙1(63)

2023年天文学热点回眸 杨隽,
赵桐,宋宇佳,苟利军1(72)

2023年空间科学与深空探测热点回眸
..... 白青江,时蓬,宋婷婷,
王琴,范全林,王赤1(87)

2023年行星物理学热点回眸
..... 魏勇,柴立晖,陈一定,范开,
高佳维,何飞,乐会军,李国主,林红磊,
恭超,戎昭金,宋玉环,孙伟家,王誉棋,
吴兆朋,徐长仪,闫丽梅,尧中华,袁憧憬,
乐新安,张驰,张辉,张金海,钟俊1(99)

2023年水污染控制与水资源利用热点
回眸 李江,张婷,潘章斌,
李媛,李彦澄,丁士元,孟庆梅,王斌,
王涛,杨超,刘保森,高军凯,王晶,
张雅琴,王燕杉,罗阳,侯立安1(114)

2023年海洋气象研究热点回眸
..... 王麟,王东晓,邱春华,张广隶,
邹仲水,胡湛,戴潇铭,杨桐,席紫涵,
贺根凯,张微微,张一,廖喜扬,
姚凤朝,孟崢1(124)

2023年采油采气工程技术热点回眸
..... 刘合,金旭,师俊峰1(136)

2023年生命科学热点回眸
..... 张文阳,杨昱皓,朱恒乐,朱芳,
王呈呈,胡荣贵1(150)

2023年小麦新基因挖掘和遗传改良
新技术研究回眸 叶兴国,
林志珊,王轲,唐华丽,韩志阳1(174)

2023年新型光电半导体材料热点回眸
..... 马伟,凡群平,刘宇航,闫晗,
周科,王艺林,赵超,毕召召,吴强,
王炳俊,白海瑞1(188)

2023年镁基储氢材料研究热点回眸
..... 邹建新,丁文江1(204)

2023年无人机热点回眸
..... 段海滨,梅宇,赵彦杰,霍梦真,
牛轶峰,王寅,袁莞迈,邓亦敏,范彦铭,
朱纪洪,李轩,罗德林1(217)

2023年网络空间安全科技热点回眸
..... 冯登国,连一峰1(232)

2023年量子信息热点回眸
..... 李传锋1(245)

2023年生成式AI大模型发展热点回眸
..... 邓佳文,任福继1(266)

2023年全同态加密研究热点回眸
..... 范瑞琦,陈铭志,牛鑫雨,
董文阔,李晓霖,刘硕,刘静,赵明,
蔡嘉跃,闫阔,朱树永,郑珂威,
徐鹏,郝沁汾,孙凝晖1(286)

2023年扩展现实(XR)热点回眸
..... 范丽亚,马介渊,刘希涛,
王祎银,孙菁雨1(396)

2023年城市AI研究热点回眸
..... 姚冲,甄峰,席广亮1(306)

2023年工业控制系统安全热点回眸

..... 程鹏,张镇勇,车欣,
陈积明1(314)

后量子密码算法与芯片设计研究进展
..... 刘冬生,李奥博,胡昂,陆家昊,
黄天泽,杨朔,李翔,张嘉明2(20)

忆阻器及其存算一体应用研究进展
..... 江之行,席悦,唐建石,
高滨,钱鹤,吴华强2(31)

超导量子芯片硅穿孔填充技术
..... 郑伟文,栾添,张祥2(50)

中美博弈背景下中国汽车芯片产业的
困境及建议 霍佳鑫,李哲2(58)

共享出行公平性研究进展
..... 魏宗财,谢蕊敏,
黄伟超,兰志懿3(36)

地铁可达性对生活满意度的影响研究
进展 塔娜,王琦3(44)

城市公共交通可达性公平的测度及其
分异研究进展
..... 陈慧灵,杨雪珂,王武林3(53)

健康视角下社区环境对休闲性体力活动
的影响研究进展
..... 李宇涵,申悦3(63)

“人本转向”下的城市步行环境测度与
评价方法研究进展
..... 杨文越,朱钰娟3(75)

考虑公平性的定制公交路径规划及系统
评估 刘锴,王静,
连芝锐,王江波3(89)

城市交通公平性的识别方法
..... 谢波,李晗3(97)

建成环境对居民肥胖的影响机制
..... 彭科,贾一鹤,梁茵桐,
魏雨娇,廖桂贤3(107)

水泥制造业绿色低碳技术研究进展
..... 沈鸿海,刘宇,郑焱,
裴先政4(21)

COSMO-RS方法筛选离子液体用于气体
捕集分离研究进展
..... 焦梦青,张瑞雪,齐乐天,
赵楠4(31)

厌氧氨氧化工艺影响因素及其耦合工艺
研究进展 罗安腾,吴莉娜,
和书航,贾春芳,张瑜麟,尹莹4(40)

废弃电子产品处置方法及生命周期
评价研究进展 龚汉芳,杜世伟,
高峰,龚先政,迟晓光4(52)

废弃SCR脱硝催化剂处置与回收研究
进展 黄延伟,朱媛霏,
杨秀红,张迎春4(62)

战略性矿产资源清单、供需形势与对策
..... 李裕伟5(26)

中俄战略性矿产目录对比及贸易情况
分析 张雅丽,陈从喜,
隋延辉,孙春强5(38)

中国铝矿开发利用现状及资源形势分析
..... 李政,吴琪,张必欣,陈从喜,

吴初国,高宇,仇巍巍,王楠5(47)

中国镍矿供需形势及对策建议
..... 吴琪,李政,王楠,陈从喜,
吴初国,高宇,朱先云,齐书花5(53)

镍全球治理框架体系构成、演变及中国
参与路径选择 郝洪昌,王安建,
马哲,韩梅5(61)

钴资源全球治理体系及中国参与路径
..... 袁小晶,王安建,马哲5(70)

锂资源全球治理体系历史演变、现实困境
与中国参与策略 魏江桥,
王安建,马哲,韩梅5(81)

战略性金属矿产供需关系评估
——基于风电产业链的研究
..... 段悦,葛建平5(92)

中国交通现代化的国际比较和路径研究
..... 赵西君,陈晓博,
郭剑锋,刘思瑶6(25)

中国式现代化道路下的粮食安全:实践
历程与提升路径
..... 巴雪真,钟钰6(35)

加快推进中国噪声治理体系现代化
..... 魏新渝,张爱玲,毛玉如,杨军,
张丽娟,汪婕,王世强6(42)

中国城市规划管理现代化发展进程与
趋势 黄竞雄,党安荣,
李翔宇,翁阳6(51)

论建立与发展中国创新战略学学科
..... 吴金希6(61)

中国式现代化视域下科技伦理治理的
问题意识 王硕,文侃骁,
李正风6(69)

创新驱动:“双碳”目标实现的科技行动
思路与对策 邵超峰,战雪松,
车贝贝7(15)

中国电力供应可靠性经济价值评估
..... 曲中,王千安,林瑾,张佳琪,
贾雅雯,周琪7(25)

“双碳”目标驱动下煤系伴生资源协同
开发技术框架 王方田,张辰凯,
张村,贾胜7(40)

煤炭资源型城市水-土-能耦合分析
——以淮南市为例 叶元元,
武慧君,汪倩倩,戴成娟7(56)

粮食生产技术进步对碳排放强度的影响
及作用机制
..... 闫豪玮,穆月英7(66)

中国主粮种植面积变化的影响因素
——基于荟萃分析
..... 李荣强,陈轩,施龙中7(76)

内蒙古生态屏障区固碳服务效应分析
..... 刘婧雅,秦克玉,董战峰7(84)

林草生态系统固碳增汇的增长潜力及
交易机制 陈文汇,李华7(84)

西方发达国家碳壁垒政策对中国的影响
及应对策略 任艳红,倪微琪,
顾思婷,李晓亮,董战峰7(103)

双光束超分辨光刻技术的发展和未来
 谢大乐,艾星星,甘棕松 8(21)

第三代半导体发展现状及未来展望
 高爽,郑宇亭,张志国 8(29)

动态红外伪装技术研究进展
 徐高平,马治,董士博,王潘宇,
 陈晓玉,周明星,张雷鹏 8(39)

软体机械手关键技术研究进展
 付敏,王鹏,王成梦,曹众,
 陈见坤 8(48)

仿生阻尼材料3D打印研究进展
 尹念,王建平,陈耿彪,
 易继军 8(63)

无缺血器官技术移植研究进展
 李治夫,张明照,吴少海,
 陈宏琿,黄金波,鲁昌涛,姚尧,
 赵强,何晓顺 8(76)

《美国政府关键和新兴技术国家标准战
 略》的动向及对中国的影响
 孙红军,张明,程煜,
 甘克勤,黄菊秀 8(83)

边缘计算与区块链在智慧用电中的应用
 赵志宇,谢林江,耿贞伟,
 杨本富,李力,罗焘,杨鹏生 9(17)

基于边缘计算与区块链融合的智慧用
 电平台的研究与设计
 杨开兴,满红任,刘秀,陈晨,
 刘雪萍,李晋源,黎晚晴,
 李正轩 9(26)

云边协同与区块链融合架构研究与设计
 李申章,杨铮宇,李力,马鑫堃,
 吴玮,李良静,张逸彬,周智勋 9(39)

基于容器化的云边高效应用管控方法及
 应用 张建安,毛正雄,姜莹,
 黄世锋,张劲松,杨本富,杨仕军 9(51)

运行于边缘物联网设备的区块链轻型应
 用研究与实现 衡星辰,普钢,
 李零,陈达,张劲松,周智勋,
 姜文喆 9(60)

基于改进YOLOv5s模型的风电叶片内腔
 缺陷检测 张成义,郭贺 9(67)

基于改进SSD模型的风电叶片内腔缺陷
 检测 郭贺 9(76)

纯基础研究中科学思维的探讨
 杨文采 10(18)

哲人科学家:人类思想史上路标的设置者
 李醒民 10(24)

科学进步的动力学模式 郝刘祥 10(27)

智能时代呼唤新的科研方法
 李国杰 10(30)

物理学求美至真的方法论
 ——从科学可证伪性到奥卡姆剃刀
 原则 孙昌璞 10(46)

从天文学和物理学的发展理解科学方法
 的3次飞跃 张双南 10(55)

谈生命科学等领域原创性基础研究成果
 的获得与评价 昌增益 10(65)

“十多”分析法及其在新交叉研究领域
 的应用
 ——基于方法论与方法的探讨
 陈樱花,陈雅楠,陈安 10(74)

我国城镇污泥新污染物的赋存特征、治理
 现状及防控策略 李江,邹晓爽,
 王斌,侯立安 11(18)

新污染物抗生素菌渣环境污染防控策略
 周晓雅,侯立安,田书磊,
 王旭明 11(29)

城镇污水厂新污染物赋存特征及去除技
 术研究进展 封涛涛,王斌,
 李江,王涛,许晓毅,侯立安 11(36)

苯并[a]芘厌氧降解菌群的富集及其条件
 优化 易倩文,肖芳,邹晓爽,
 李江,张云涛,代永恒,王斌,
 侯立安 11(47)

关于科学研究的3个层次
 ——第二十六届中国科协年会主论
 坛主旨报告摘要
 薛其坤 12(14)

创制纤维新材料,发展新质生产力
 ——第二十六届中国科协年会主论
 坛主旨报告摘要
 朱美芳 12(15)

以科技创新发展新质生产力,为数字经济
 激发澎湃新动能
 ——第二十六届中国科协年会主论
 坛主旨报告摘要
 陈忠岳 12(16)

新质生产力推动核电高质量发展的实践
 路径研究 叶奇蓁,苏置,黄文,
 赵万广,阮天玥,熊凯,林贤军 12(17)

PAN基碳纤维的发展及国内外第3代高性能
 碳纤维的进展
 钱鑫,王雪飞,张永刚 12(27)

生成式人工智能的研究现状和发展趋势
 车璐,张志强,周金佳,
 李磊 12(35)

通用大模型演进路线
 任福继,张彦如 12(44)

多组学大数据与医学发展
 刘斯洋,林星辰,程丝,
 王超龙,李昊 12(51)

疾病风险动态预测模型方法前沿进展与
 精准预防 宋雨昕,叶倩,
 赵盟生,张隆焱,魏永越 12(75)

机器人在管道提升式深海采矿系统中智
 能化的挑战与发展趋势
 沈义俊,张炜峰,周健一,
 全嘉鑫,李文庆,刘悦凡,
 张瑞永,李萌 12(92)

涡旋波超表面研究现状与应用进展
 司黎明,陈璐璐,
 孙厚军,吕昕 12(107)

煤层气直接催化氧化制甲醇研究进展
 袁亮,安胜欣,薛生,

张通,赵帅博 12(125)

多孔介质科学问题研究进展
 刘曰武,丁玖阁,
 崔春雪 12(143)

自主无人系统的具身认知智能框架
 孙长银,穆朝絮,柳文章,
 王晓 12(157)

基于时序逻辑任务的人机融合异构多
 智能体协同控制研究进展
 张心懿,方浩,赵欣悦,
 陈仲瑶,柯唯翎 12(167)

锂离子电池的热失控与预防
 李存璞,唐晓霞,
 魏子栋 12(178)

全球种业趋势及中国种业创新发展建议
 程华,王刚毅 12(193)

海洋工程典型装备智能化研究进展
 阎军,苏琦,许琦,杨建业,
 陈金龙,卢海龙,武文华 13(16)

基于GBRT模型的海洋平台结构裂纹扩展
 识别 李阳,苏馨,代彤彤,张崎,
 黄一,贾子光 13(27)

基于谱位移格式的复杂切口功能梯度板
 自由振动等几何分析
 杨少伟,孙贤波,蔡志勤,
 卢海龙,杨志勋 13(36)

海洋环境下金属管道力-腐蚀电场耦合特
 性分析 夏江敏,丁建伯,
 苏里阳,张雨杭,张丹 13(48)

基于虚拟激励法的防震 LNG 储罐随机地
 震响应分析 刘富鹏,叶忠志,
 孙晓旭,秦玉良,王立佳,余建星,
 王晓虎,雷鸣,李浩然 13(54)

平台耦联作用下的悬链线型柔性立管涡
 激振动响应实验 朱红钧,
 刘文丽,宋金泽,高岳 13(62)

LNG耐超低温柔性管道实验测试研究
 进展 英奎蓬,阎军,张凯仑,
 曹慧鑫,步宇峰,卢青针,杨志勋 13(73)

基于量纲分析的柔性立管骨架层辊弯成
 型弯曲变形特征预测
 王心悦,阎军,袁振钦,
 李文博,卢海龙,陈金龙 13(86)

基于深度学习的悬链线单点系泊设计
 指标预测 孙强,李颜,彭东升,
 王宇新,阎军,岳前进,钟万颢 13(95)

液化天然气卸料臂结构计算分析与紧急
 脱离装置可靠性研究
 杨亮,肖立,许佳伟,郝思佳,
 邱灶杨,范嘉堃,盖小刚,陈举 13(105)

基于结构特征的 LNG 低温软管内流场流
 动特性研究 刘森儿,李方道,
 程昊,李欣欣 13(118)

海洋应急通信网络智能监控与调度系统
 设计及实现 周雪,金上玺,
 谢硕,闫建峰,王晓瑞,孟俊峰,
 欧阳照红,黄宛宁 13(125)

中国水下考古的发展与展望
..... 孙键 14(38)

中国深海考古三部曲
..... 宋建忠 14(48)

水下考古机器人研究与应用进展
..... 郭威,徐高飞,王敏健,
李滨,高森,袁博 14(61)

国外水下考古探测技术的发展趋势
..... 李滨 14(73)

综合海洋勘测技术在长江口二号沉船
打捞过程中的应用
..... 于小刚,梁国庆,
刘芝波,隋海琛 14(81)

水下沉船的高精度三维地形探测技术
——以老牛礁沉船为例
..... 刘伯然,许江,房旭东,
胡毅,王立明 14(91)

三维合成孔径技术在水下浅埋目标物探
测的应用 贺惠忠,章仲怡,
谢安远,陈栋,李正元,何西 14(99)

区域系统调查的水下考古
——以渔山列岛海域为例
..... 王光远,李滨,林国聪 14(108)

超短基线定位和流速剖面在圣杯屿沉船
水下考古中的应用 黄泽鹏,
冉德禄,阮永好 14(116)

宋元以来中国沿海古代沉船的考古学
观察 陈浩,梁国庆 14(125)

氢中医:氢医学领域一个新兴的研究方向
..... 杨海燕,王尉荧,应乐安,
孙志轩,丁之光,丁文江 15(15)

氢在农业中的研发进展
..... 杨海燕,张秋雨,凌翔,刘亚倩,
潘琪芳,韩京龙,丁文江 15(22)

氢冶金场景下规模化固态氢储运技术的
开发及应用
..... 魏炜,饶文涛 15(40)

浆氢技术研究进展 陈树军,王可成,
付越,张琳 15(49)

镁氢包衣对大豆萌发和幼苗生长的影响
..... 杨海燕,张秋雨,潘琪芳,
初少华,杨夕佳,韩京龙,
周培,丁文江 15(58)

中国农业科技进步的探索历程、实践经验
与政策展望
..... 匡远配,阳佩玉 16(14)

中国粮食增产的贡献分解与路径分析
..... 王怡婷,文姝蓉,
果文帅,钟钰 16(26)

技术进步偏向视角下中国粮食产能提升
的新路径
——以五大粮食净调出省为例
..... 孙中叶,杨传宇 16(40)

农业科技创新对粮食生产韧性的影响
..... 彭长生,黄兴宇,
王澎,钟钰 16(47)

科技创新赋能粮食产业高质量发展的理

论逻辑与实现机制
..... 韩莉,战磊磊 16(58)

3个层面科技协同促进粮食产业的发展
..... 杜磊 16(66)

减污降碳视角下的粮食绿色低碳生产:现
实基础、主要问题与优化路径
..... 明若愚,李凡略,何可 16(72)

极端气候对中国粮食生产的影响及其应
对措施 许航,刘盛,
刘磊,刘学军 16(82)

“双碳”目标约束下应对气候变化的农户
适应性行为
..... 陈苏,陈义凯 16(91)

欧盟食物系统研发创新支持政策的经验
..... 崔海霞,高一丹,宗义湘 16(98)

中国国家公园助力生物多样性保护路径
研究进展 张晶晶,徐基良 18(20)

新时期中国生物多样性保护主要进展及
建议 曹铭昌,杨欢,李婧婷,
于丹丹,方磊 18(28)

碳中和目标下中国国家公园建设与管理
..... 王伟 18(37)

生物多样性保护与可持续发展背景下的
生态安全 郑舒元,刘国华,
万凌凡,赵俊彦,李佳佳,
左玲丽,苏旭坤 18(46)

国家公园生态保护理论及相关技术的国
际经验与启示
——以美国、加拿大和法国为例
..... 魏钰,左奥杰,乔娜 18(58)

中国国家公园全民公益性理念实现现状、
问题与国际经验借鉴
..... 朱森,汤春芳,汤凌,
张慧智,黄宝荣 18(66)

“双碳”目标下中国能源转型的战略思考
..... 王戎,陈祉叶,曾嘉伟,王怡静,
曹军骥,汤绪,张人禾 19(10)

“双碳”目标下气候变化风险的预估:从全
球到区域 程方圆,左志燕,
乔梁,张楷文,常美玉 19(20)

碳中和目标下中国光伏发电潜力、空间格
局与综合效益分析 曾嘉伟,
陈祉叶,王怡静,王戎 19(34)

“双碳”目标下中国风力发电的潜力预估、
电力运输与能量储存的影响
..... 陈祉叶,曾嘉伟,
王怡静,王戎 19(47)

“双碳”目标实现对中国城市空气质量的
影响 王浥尘,董路,张琳茹,
谢梅英,韩潇,曹军骥 19(59)

“双碳”目标下中国航运业绿色转型展望
..... 张艳,钱浩祺,黎泉 19(66)

全球碳中和背景下中国气候与极端气候
变化 蔡子怡,游庆龙,吴芳营,
江志红,翟盘茂 19(73)

全球供应链转移对中国“双碳”目标的
影响 王润雨,黄韬,凌再莉,

任吉,魏梓建,宋世杰,马建民 19(85)

制定和实施以健康为核心的气候治理
体系 欧阳慧灵,
汤绪,张人禾 19(98)

完善中国宁静区域创建制度的研究
..... 魏新渝,赵桂英,王尔奇,
严紫薇,毛玉如,彭立新 20(14)

中国噪声自动监测的现状和发展
..... 毛玉如,汪贇,张建勤 20(23)

声学材料研究进展及其在工业噪声污染
治理中的应用 冯涛,尤炫惠,
汪捷,王晶 20(32)

基于综合优化方法的电力设备动力吸振
技术研究 耿明昕,马建刚,
白晓春,孙强,申晨,魏新渝 20(48)

中国建筑施工噪声污染防治对策
..... 郭弘,魏巍 20(55)

中国高速铁路噪声控制研究进展
..... 刘兰华,李志强,
周铁军,伍向阳 20(60)

城市轨道交通噪声污染防治进展
..... 户文成,刘磊,康钟绪,宋瑞祥,
张慧娟,刘强 20(70)

道路交通噪声控制技术研进展
..... 袁旻恣,王彦琴,邵社刚,
李明亮 20(85)

道路交通噪声预测中单车噪声模型研究
..... 张丽娟,汪捷,杨洁,
王蓓蓓,赵桂英 20(95)

机场周围区域航空器噪声控制国际比较
及经验借鉴 汪贇,魏新渝,
吴晓燕,赵桂英 20(103)

噪声地图技术在噪声污染防治监管中的
发展和应用 刘磊,户文成,
赵彬彬,樊剑剑 20(110)

中医药真实世界数据质量评估方法进展
..... 张泽丹,王斌,张雯,赵冉,何畅,
温宵宵,文天才 21(13)

中医药干预冠心病临床实践指南构建与
真实世界证据应用分析
..... 王科雯,罗文晔,张菁,
郝秀炜,孔德昭 21(20)

中西药调控神经递质治疗抽动障碍研究
进展 陈惠敏,龚宇,钱乔乔,
刘智胜,何丽云 21(39)

中医药对慢性肾脏病3—5期患者肾功能
进展的保护作用
..... 朱佩琦,何佳怡,谢佳东,
赵静,唐睿婕,孙伟,何伟明 21(47)

基于大数据知识工程的真实世界中医
临床研究思路与实践
..... 孙婷,张盼,宋淑洁,李君,
李晓东,沈绍武,肖勇,田双桂,
黄缙,毛树松 21(55)

基于医案数据的中医经方传承与转化
方法研究 方雨莹,邵明义,
张容容,赵瑞霞,刘亚楠,崔鸿雁 21(66)

基于真实世界数据的科学问题发现研究
 …… 赖科云, 陈霄, 宋虎杰, 赖昌生, 王凯悦, 白杨, 张焯, 怡文辉, 刘海洋, 冉静纯, 谭福雄, 田亚丽, 王振国, 王广军 21(73)

基于患者偏好分析复合终点的疗效评价方法及其对中医的启示
 …… 李双婧, 闫世艳, 陆盈 21(87)

基于便秘中医临床数据的真实世界研究及处方验证 …… 倪昱橙, 朱溪, 潘思哲, 朱雨楠, 刘华, 李家诚 21(94)

中医针刺与“全脑语言”治疗模式在儿童语言障碍中的诊疗策略
 …… 贺媛, 张宇勃, 高铭, 杨冲, 宋虎杰, 樵成, 赵亮 21(102)

“调经促孕”针法治疗频次对早发性卵巢功能不全临床疗效的影响
 …… 卓缘圆, 蒋丽娇, 罗燕, 黄杏贤, 杨卓欣 21(114)

醒脾胶囊治疗腹泻型肠易激综合征的临床观察 …… 张琪, 张迪, 秦宇宁, 王鑫, 艾艳珂, 吕晓颖, 盛煜栋, 赵天易, 李洪皎 21(122)

益气养血法预防实体瘤化疗所致骨髓抑制的队列研究 …… 何文婷, 左森, 轩艳红, 张洪亮, 胡兰, 张彤 21(132)

身痛逐瘀汤质量标志物(Q-Marker)的预测分析 …… 杨云云, 陈祁青, 王建伟, 马东, 安德浩, 王化省, 朱宝, 田广芳 21(139)

基于机器学习模型分析镇肝熄风汤治疗高血压病的配伍特征研究
 …… 邝家铭, 陈晓晴, 杨雯晴, 李洁, 滑振, 王怡斐, 李运伦 21(149)

真实世界研究的伦理考虑及在中医临床中的思考 …… 李若琪, 段文慧, 王东, 薛一鸣, 王培琛, 訾明杰 21(163)

卫生经济学评价在针灸国际化推广路径上的重要价值 …… 曾典, 郭然, 刘远立, 何丽云, 刘保廷 21(170)

日本“台帐”模式汉方药真实世界研究方法的启示 …… 苏雯, 彭少衍, 西村一郎 21(180)

自体软骨细胞移植技术治疗关节软骨退变 …… 侯建雷, 刘鹏卫, 姜川, 张仲文 22(15)

脐带血中的非血小板核糖核酸粒子对肺癌A549细胞的影响
 …… 张雪琳, 云升, 石秀换 22(23)

食源性γ-氨基丁酸与促进慢病人群健康研究进展 …… 丁一, 王佳宁, 丁海涛, 艾华 22(30)

卵圆孔封堵术对老年人群卒中风险的保护作用 …… 夏成, 周持恒, 向世强 22(43)

认知行为疗法对合并躯体疾病的老年抑郁症患者的疗效与优势

…… 李平, 孙志刚, 徐曼华, 何兰英, 杜义敏, 王立峰, 张培, 宋丽华 22(49)

单髁置换与微创膝关节置换治疗老年膝关节炎的疗效分析
 …… 王永祥, 包呼日查, 魏宝刚, 马秉贤, 牛啸博, 王一帆, 齐岩松, 徐永胜 22(56)

益生菌补充剂对高水平运动员氧化应激水平的保护机制
 …… 宁方堂, 马国强, 王昱儒 22(63)

中医药在围绝经期子宫内异位症术后中的应用 …… 郑娟, 韩莹, 王丹凝, 吴丹, 丛慧芳 22(70)

中医综合康复在老年转子间骨折术后的应用 …… 魏鹏轶, 乔钢, 邵玮, 崔玮佳, 冯兆峰, 谷亚彤, 张瑜 22(76)

面向人机融合的DIKWP应用进展
 …… 梅映天, 段玉聪 23(41)

智能化导航防御御样式研究
 …… 杨帆, 吴忠望, 王小海, 李明贵 23(54)

跨越学科、领域、文化和文明的智能
 …… 刘伟, 邹阳洋, 孙维一 23(62)

人工智能在心理评估中的研究进展
 …… 姚峰, 王雷, 韦正德, 张效初 23(70)

人工智能技术追赶与新兴风险的潜在关联分析 …… 李芳, 王晶晶, 黄颖, 姜李丹 23(79)

感知风险下的采用: 人脸识别支付接受度分析 …… 李玟玟, 韩玮, 陈安 23(85)

基于液态金属对流的电子设备冷却研究进展 …… 常向廷, 董伟, 韩俊杰, 董进喜, 刘治虎, 赵航 24(30)

平板热管性能优化及其在航天热控中的应用进展 …… 冷亚坤, 张旭, 甄华龙, 刘迎春, 王仲琦, 蒲亮 24(46)

基于废热循环利用的电动汽车分布式热源梯级制热策略
 …… 丁鹏, 张美娟, 张鹏博, 李萌, 喻春明 24(58)

高温和液氮循环作用后花岗岩孔隙结构演化及其劣化机制
 …… 王振强, 狄佳, 吴杨, 李艳, 谷智, 高爽 24(70)

铁硼热籽在磁感应热疗交变磁场中磁损耗功率的实验与模拟
 …… 李静, 施柏源, 林梓昕, 徐苏华 24(79)

综述

亚胺类共价有机框架研究进展
 …… 楚正坤, 刘洁 2(67)

混合动力汽车电池寿命预测及能量控制管理策略 …… 武旭东, 王靖岳, 薛春伟, 郑璐文, 雷虎, 王军年 2(79)

铁尾矿资源化利用现状与发展策略
 …… 张振国, 王月, 陈军典, 高倩 2(90)

我国矿山智能机器人应用现状及发展策略 …… 付恩三 2(104)

铸旋铝合金车轮生产工艺研究进展
 …… 岳峰丽, 焉伟豪, 张孟泉, 宋鸿武, 张士宏 3(123)

量子化学方法在煤自燃机理方面的应用及进展 …… 张卫, 臧立岩, 李靖 4(73)

铝氢化钠储氢性能及其改进方法研究进展 …… 仝小刚, 李志鹏, 程军锋 4(84)

智慧海洋数字孪生技术及其应用
 …… 赵龙飞, 姜晓轶, 洪宇, 孙苗, 王漪, 康林冲, 曹磊 4(91)

稻纵卷叶螟化学农药减量增效防治技术进展 …… 陈澄宇, 赵云霞, 唐艺婷, 张学峰, 张凯, 车国静, 朱庆, 张霄, 刘媛, 刘贤金 6(79)

国内外无人机交通管理系统比较
 …… 李章萍, 马怡君 8(91)

基于模型的可靠性、安全性分析方法
 …… 张金辉, 赵滢, 毛寅轩, 卢志昂, 杨卓鹏, 张龙喜 8(101)

碳纳米材料改性聚氨酯泡沫研究进展
 …… 康兆龙, 李晓岫, 陈鹏, 孙彬, 徐新宇, 黄玉东, 王彩凤 9(85)

肌肉组织慢性损伤研究进展
 …… 孙昊, 何玲, 刘丹 9(94)

体外冲击波治疗骨关节炎及其机制研究进展 …… 梁家铭, 陈欣, 马志燕, 张颖煜, 赵琳琳, 刘莹莹, 刘亚军 11(58)

抗炎类药物治疗骨关节炎研究进展
 …… 马志燕, 贺子晔, 梁家铭, 赵琳琳, 张颖煜, 刘莹莹, 刘亚军 11(66)

柑橘黄龙病检测及防控方法研究进展
 …… 张天宇, 杨钙仁, 何寻阳, 刘秋梅, 李德军 11(75)

布鲁氏菌病诊断标志物与治疗靶点研究进展 …… 王波, 丁海涛 11(84)

增强型地热系统实验模拟装置研发进展
 …… 唐佳伟, 李井峰, 方杰, 刘月阳, 郭强, 时俊杰, 李杰 15(69)

认知友好社区建设研究进展
 …… 董慰, 赵月镭, 董禹, 蔡佳淇 17(53)

广义无障碍视角下的感官花园研究进展
 …… 冯天仪, 贾巍杨 17(65)

均一微滴制备技术研究进展
 …… 王同举, 张琦美, 张文倩, 雷永平, 林健, 符寒光 18(76)

光照治疗在双相情感障碍中的应用进展
 …… 李平, 马燕桃 18(91)

多主体协作的分布式大型队列的组织与管理模式

——以欧洲EPIC队列为例
 孙学会,李伟,周晟,
 徐萍,许丽 22(84)
 有机反应中含氟与含硫新试剂
 王乃兴 23(98)
 虚拟心脏的研发进展
 裴雨洋,于天水 24(88)
 聚集诱导发光材料在食品安全领域中的
 应用进展
 贾园,孟繁哲,杨菊香,
 李蓓蓓 24(96)

论文

地质构造因素对煤与瓦斯突出的影响
 苗彦平,郑旭鹤,王宏梁,
 折刚 2(111)
 基于改进粒子群算法的换流站多协议
 无线数据分析及预测
 毛春翔,柴斌,刘若鹏 2(120)
 中国金属铂的物质流分析 刘思杰,
 李金惠,耿涌,曾现来 4(102)
 光固化3D打印光敏树脂的临界能量和
 固化深度影响因素 陈静,
 杨晓帅,张鹏飞,张爱平 4(110)
 数字化、碳减排成本与城市低碳高质量
 发展 沈宏亮,宋思萌,
 李杰 6(86)
 中国建筑业碳排放强度的空间特征与
 影响因素分析 徐水太,
 李晔薇,董信 6(103)
 高精度经颅直流电刺激对人体上肢前臂
 肌肉抗疲劳效果的研究
 李文华,侯雨鑫,董彤彤,
 夏雪莲,郭峰 6(112)
 美国典型国防科技创新主体专利发展
 态势和布局动向
 曾张旭阳,曾立,刘书雷 7(115)
 应用改进RRT_Connect算法的机器人
 路径规划 史小旭,张烈平,
 唐柳,董路照,彭建盛 8(111)
 3,5-二氟-2,4,6-三硝基苯甲醚在熔铸炸药
 中的应用 吴凯,荆苏明,
 胡菲 9(102)
 磁头磁盘表面Zdol润滑剂转移机理研究
 费佳玟,陈语欣,杨秀杰,
 聂开勋,唐正强 11(92)
 “双碳”目标下森林公园植被空间配置对
 降温效果的影响
 ——以福州森林公园为例
 刘东兰,戴忠炜 15(82)
 丝绸之路经济带沿线省份能源综合效率
 时空分异与影响因素
 ——基于超效率及地理探测器模型
 马远,张同蕾 15(91)
 国家科技项目专利产出绩效评估分析
 ——以“水专项”专利产出绩效评估

为例 ... 高继平,翟丽华 15(104)
 不同试样形状与尺寸对DZ406合金持久
 性能的影响
 张丽,张仕朝,郭婧 16(108)
 基于多尺度全卷积神经网络的核电主泵
 状态异常检测方法
 龚安,魏金铭 16(114)
 中国能源贫困的统计测度、区域差异与
 动态演进 丁煜莹,
 高志刚,克魁 17(74)
 基于网络舆情的大城市全龄空间问题识
 别及规划应对策略
 ——以武汉市主城区为例
 贺慧,张庆昊,刘畅,
 谢楚婷,荣升 17(87)
 基于数字画像的综合能源系统技术推广
 应用评价方法 梁琛,马喜平,
 董晓阳,李亚昕,罗利,徐瑞 17(97)
 支撑我国“风光”大规模发展的关键金属
 稀缺性评估与循环策略模拟
 任凯鹏,唐旭 17(111)
 基于空间句法的视障群体街旁景观体验
 性评价 韩林飞,沈璐 17(125)
 基于视觉障碍人群需求分析的生活性街
 道无障碍环境评价
 ——以哈尔滨历史城区为例
 戴铜,陈心朗,
 陈璐露,王春琦 17(130)
 基于图结构与元素信息融合的实体对齐
 技术 马浩然,王金华 18(98)
 中国海洋高新技术企业空间格局与区位
 选择因素 陈小龙,狄乾斌,
 陈科其 18(110)
 添加相对自蔓延成型铝合金筒内壁涂层
 温度的影响 管西巧,杨延峰,
 王亮,黄智,于云龙,周凯旋,
 王浩,金国 19(105)
 低吗啡综合镇痛方式在术后镇痛领域的
 临床应用 李敬,朱新炜,
 黄波,张华,臧睿 19(113)
 热处理对激光熔覆高Co-Ni钢涂层组织和
 性能的影响 秦仁耀,张国会,
 陈冰清,李能,刘伟,黄帅,
 高超,郭绍庆 22(93)
 自蔓延高温合成陶瓷内衬油管的力学和
 耐腐蚀性能分析
 管西巧,肖凤艳,黄智,谢维涛,
 王守泽,魏世丞 23(108)
 松辽盆地长岭断陷龙凤山次凹营城组-沙
 河子组致密砂岩储层孔隙演化特征
 朱鑫达,曲希玉,
 闫振,毛少华 23(119)
 基于CRF模型的《里耶秦简》自动断句与
 分词研究 冯慧敏,郭帅帅,
 刘铭 23(135)
 地震水温观测仪器现场检测方法及其对
 观测数据连续性影响的实验

..... 明晓冉,李文一,王忠彪,
 田兴宇,朱传东,唐荣 24(106)
 固定化菌藻共生系统对农村灰水的处理
 效能 刘元坤,王志维,
 于海宽 24(115)

科技人文

凤凰牌轿车的研制及其历史意义
 黄丽蓉 4(115)
 人工智能应用于军事的伦理问题
 何杰,孙啸宇,郑睿,
 王兰英 4(124)
 机器主体道德意识能否产生:人工智能机
 器伦理治理的“内在进路”探析
 谢静 8(120)
 王选的技术预见思想及创新实践
 严俊,谭超,丛中笑 10(87)
 登山的快乐是在爬山的过程中
 ——施蕴渝院士学术成长经历
 左锟澜,黄剑良,相强宇,
 高婉莹,吴宗震,刘欢 10(94)
 科学传播视域下的物理学家丁西林
 姜枫,向安强 11(98)
 人卵买卖的伦理治理与法律规制
 刘长秋,左琳,高婉琪 16(126)
 周光召对青年科技工作者的支持与关怀
 冯长根 17(144)
 “两弹一星”精神的开拓者和践行者
 ——缅怀我的恩师周光召
 吴岳良 17(146)
 周光召论“两弹一星”精神与清华大学办
 学理念 欧阳钟灿 17(152)
 光召先生对发展基础科学的一个战略
 思想 朱邦芬 17(154)
 学习周光召先生的科学精神
 孙昌璞 17(157)
 冷门学科坚持与坚守
 ——2023年诺贝尔生理学或医学奖
 的启示 李泉秀,宋潇达,
 甄橙 18(124)
 “人民科学家”顾方舟:中国消灭脊灰的先
 驱者 左锟澜,黄剑良,
 孙博,刘欢 19(119)
 《杨澜对话》专访诺贝尔奖得主
 丁肇中教授 19(128)
 光之所召 风范永存
 ——光召精神与我的科研实践
 谭蔚泓 22(102)
 深谋远虑的战略科学家 如师如兄的
 领路人
 ——周光召先生领导核武器理论研
 究二三事 吴明静 22(106)
 数学天才罗赫:智慧而短暂的一生
 段玥芮,王淑红 24(128)

General Contents of Science & Technology Review in 2024, Vol. 42

(Numbers outside the brackets represent the issues, and those within the brackets represent the pages)

Foreword

| | |
|--|---------------------|
| Opening up new fields and tracks by science and technology innovation | BAO Weimin 1(1) |
| Plan and promote the ecological development of open source RISC-V from a global perspective | NI Guangnan 2(1) |
| Creating a new pattern of urban transportation governance through joint construction, sharing, and governance | HAN Linfei 3(1) |
| Initiate the modernization of nuclear energy in China | YE Qizhen 4(1) |
| Enhance strategic critical mineral resources, safeguard capabilities, and grasp the global mineral resource pattern | ZHAI Mingguo 5(1) |
| Reflections on Chinese path to modernization from seizing the commanding heights of science and technology | WANG Chi 6(1) |
| Policy led innovation and promote the goal of carbon neutrality actively | HOU Li'an 7(1) |
| Reflection on innovation and creation in the new era | LU Yongxiang 8(1) |
| Accelerating the development of Earth system science to provide scientific support for the sustainable development of human society | FU Congbin 9(1) |
| Discussion on science and philosophy | DU Xiangwan 10(1) |
| Science and technology enable emerging contaminants control, innovation to ensure people's drinking water health | HOU Li'an 11(1) |
| Promote the development of new quality productive forces with basic research and large-scale scientific facilities | WANG Yifang 12(1) |
| Accelerate the construction of smart oceans and promote the transformation of marine engineering equipment through artificial intelligence | WU Yousheng 13(1) |
| China's underwater archaeology has achieved leapfrog development | JIN Xianglong 14(1) |
| The role of green hydrogen energy in dual carbon strategy | LI Can 15(1) |
| Promote the chemical recycling of waste plastics and effectively address plastic pollution | LI Jinghong 16(1) |
| The main theme of the modern particle physics: Higgs boson | WANG Yifang 17(1) |
| Experiences of the science-education-compromise practice across | |

| | |
|---|--------------------|
| provinces | YANG Wencai 18(1) |
| Simultaneous reduction of carbon and disaster risk to cope with extreme climate | LI Jiachun 19(1) |
| Improve the quality of the acoustical environment for human habitation | WU Shuoxian 20(1) |
| Real world study on traditional Chinese medicine in the era of positive innovation | TONG Xiaolin 21(1) |
| Enhance the research and development capabilities of the national defense technology industry as well as the performance of equipment by innovations in multibody system launching dynamics | RUI Xiaoting 22(1) |
| Strengthening the organizational construction of scientific and technological institutions to promote the emergence of innovative scientific and technological achievements | XU Jianmin 23(1) |
| Strengthening organized scientific research in universities to support high-level self-reliance and self-improvement in science and technology | LI Jinghong 24(1) |

Special to S&T Review

| | |
|--|--|
| Top advances of science, technology and engineering from China in 2023 | WANG Kangyou, XU Lijiao, WANG Zhimin, ZHU Yehua 1(7) |
| Budget analysis and enlightenment of DARPA from fiscal year 2014 to 2023 | WANG Zhao, LI Wenjuan, WANG Qiang 2(6) |
| Status quo, challenges, and prospects of China's hydrogen transportation industry | MENG Xiangyu, GU Alun, ZENG Jing, CHEN Mingyun, ZHOU Jian, LIU Bin, MAO Zongqiang 3(6) |
| Development status and trend of sustainable energy utilization in the United States and the enlightenment to China | HU Jian, WU Sheng, DENG Xili, SUN Haitao, CUI Jingwei, ZHAO Luzheng 4(6) |
| Progress in strategic critical minerals exploration and production and proposals for a new round of prospecting in China | WANG Denghong, DAI Hongzhang, LIU Shanbao, WANG Chenghui, YU Yang, ZHAO Zhi 5(7) |
| A Chinese path to modernization on Space Science & Technology | WANG Chi, SONG Tingting, SHI Peng, FAN Quanlin 6(6) |
| Modern science and traditional culture | WANG Pingxian 6(16) |
| Innovation and development of carbon neutral policy for green development | BAI Yuxin, DONG Zhanfeng 7(6) |
| Paradigm Shift: From human-computer interaction to human- | |

- engaged computing WANG Chen, REN Xiangshi 8(6)
- Network security risks and new countermeasures under the smart grid environment YUE Fang, WANG Xuezheng, JIANG Shan 9(6)
- Deng Jiaxian, a model of practicing the spirit of scientists and a pioneer of the Two Bombs Li Jianqiang, Xu Jin 10(6)
- New pollutants in river and lake water: Occurrence characteristics, ecological risks, and prevention and control measures WANG Bin, LI Wenjia, WANG Tao, LI Jiang, XU Xiaoyi, ZHANG Lin, HOU Li'an 11(6)
- Prospects for the cyclical and structural trends of China's new energy vehicles in the next ten years OUYANG Minggao 12(6)
- Development and trends of underwater robots for inspection, maintenance and repair for offshore oil and gas platforms: A review JIANG Zhe, ZHAO Yu, HUANG Jianxia, WANG Fang, CHEN Yi, LUO Chuankun, LUO Gaosheng 13(6)
- Major optical advances in 2023 XIE Xinglong, LI Xinran, TONG Miaoyan, ZHU Jianqiang 14(5)
- The natural hydrogen inside the Earth YANG Wencai 15(7)
- The characteristics and development path of China's food security governance ZHOU Lin, ZHONG Yu 16(6)
- On the competence and growth path of distinguished engineers: An analysis on the samples of National Engineer Award winners LIU Yaqi, HAN Sijia, BAI Qiyu 17(7)
- On the ESA Vigil space weather mission WANG Chi, LI Ming, WEI Haiyan, SHI Peng, LUO Bingxian, FAN Quanlin 17(16)
- Research progress on membrane based lithium extraction from salt lakes DENG Ziqi, CHENG Rong, SHI Lei, ZHENG Xiang 18(5)
- Why does 2024 Nobel Prize favor artificial intelligence LI Guojie 19(6)
- Theoretical study of $\text{La}_3\text{Ni}_2\text{O}_7$ and $\text{La}_4\text{Ni}_3\text{O}_{10}$ YAO Daoxin 20(6)
- Intelligent scientific research paradigm promotes the high-quality and efficient development of traditional Chinese medicine LIU Baoyan 21(6)
- Research status and prospect of aging mechanism and intervention LI Jingyi, FAN Yanling, HUANG Haoyan, ZHANG Yiyuan, LIU Beibei, LIU Guanghui 22(6)
- Frontiers and review in global nuclear energy science and technology YANG Jun, SUN Peijie, PENG Cuiting, HU Mengyan, HUANG Xi, ZHANG Weixuan, HUANG Yuhang, LUO Zhipeng, XU Lejin 23(7)
- The revolutionary transformation from oil generation to oil production in the Cretaceous Gulong shale in Songliao basin and its strategic significance BAI Bin, LI Guoxin, BAI Xuefeng, ZHU Rukai, CUI Baowen, LEI Zhengdong, MENG Siwei, HE Kun, LIU He 24(5)

Suggestions

- Experience analysis and suggestions on promoting the development of open source software and hardware GUO Tengda, ZHANG Mingxi 2(14)
- Enlightenment of the advisory topic selection and organizational mechanism of the US National Research Council MENG Hongfei, WAN Jinbo, BAI Guangzu, CHEN Chun, WANG Qiang, LI Yan, WANG Weiyong 3(27)
- Implications of guardrail clauses in U.S. CHIPS and Science Act and suggestions for responsive strategies DING Ru 17(28)
- International development and inspiration of service-integrated housing for the elderly ZHOU Yanmin, ZHENG Yuanwei 17(41)
- A study of the current situation and characteristics of the incentive mechanism for researchers in Japan XU Shuang, WU Jinxi 23(31)
- Integrated development of innovation chain and industry chain: Transformation results and collaborative analysis JIAO Dehan, LU Chunfang, CAI Chaoxun, MA Chengxian 24(13)
- Security posture of critical mineral supply chain in the U.S. under the background of the superpower games and the inspiration for China WANG Zhao, LI Ying, LIU Pingping 24(21)

Exclusive

- Annual review of the advances in nuclear physics MA Yugang 1(30)
- Hotspots of metamaterials research in 2023 ZHOU Ji, YU Xianglong 1(63)
- Top astronomy events in 2023 YANG Jun, ZHAO Tong, SONG Yujia, GOU Lijun 1(72)
- Review of 2023 global space science advances BAI Qingjiang, SHI Peng, SONG Tingting, WANG Qin, FAN Quanlin, WANG Chi 1(87)
- Review of planetary physics in 2023 WEI Yong, CHAI Lihui, CHEN Yiding, FAN Kai, GAO Jiawei, HE Fei, LE Huijun, LI Guozhu, LIN Honglei, QI Chao, RONG Zhaojin, SONG Yuhuan, SUN Weijia, WANG Yuqi, WU Zhaopeng, XU Changyi, YAN Limei, YAO Zhonghua, YUAN Chongjing, YUE Xin'an, ZHANG Chi, ZHANG Hui, ZHANG Jinhai, ZHONG Jun 1(99)
- Hot spots of water pollution control and water resource utilization in 2023: An overview LI Jiang, ZHANG Ting, PAN Zhangbin, LI Yuan, LI Yancheng, DING Shiyuan, MENG Qingmei, WANG Bin, WANG Tao, YANG Chao, LIU Baosen,

| | |
|--|---|
| GAO Junkai, WANG Jing, ZHANG Yaqin, WANG Yanshan, LUO Yang, HOU Li'an 1(114) | LI Xiang, ZHAGN Jiaming 2(20) |
| Review of hotspots of marine meteorology in 2023 WANG Lin, WANG Dongxiao, QIU Chunhua, ZHANG Guangli, ZOU Zhongshui, HU Zhan, DAI Xiaoming, YANG Tong, XI Zihan, HE Yinkai, ZHANG Weiwei, ZHANG Yi, LIAO Xiyang, YAO Fengchao, MENG Zheng 1(124) | Review of recent research on memristors and computing-in-memory applications JIANG Zhixing, XI Yue, TANG Jianshi, GAO Bin, QIAN He, WU Huaqiang 2(31) |
| Annual review of advances in oil & gas production engineering tech- nologies LIU He, JIN Xu, SHI Junfeng 1(136) | Through silicon via filling technologies in superconducting quantum ZHENG Weiwen, LUAN Tian, ZHANG Xiang 2(50) |
| Research highlights of bioscience in 2023 ZHANG Wenyang, YANG Yuge, ZHU Hengle, ZHU Fang, WANG Chengcheng, HU Ronggui 1(150) | The difficulties and countermeasures of China's automotive chip industry in the context of the US-China game HUO Jiaxin, LI Zhe 2(58) |
| Annual progress on new gene characterization and novel technology development for wheat genetic improvement in 2023 YE Xingguo, LIN Zhishan, WANG Ke, TANG Huali, HAN Zhiyang 1(174) | Research progress on equity of shared mobility: A review WEI Zongcai, XIE Ruimin, HUANG Weichao, LAN Zhiyi 3(36) |
| Hot spots review for new photovoltaic semiconductor materials in 2023 MA Wei, FAN Qunping, LIU Yuhang, YAN Han, ZHOU Ke, WANG Yilin, ZHAO Chao, BI Zhaozhao, WU Qiang, WANG Bingjun, BAI Hairui 1(188) | Research progress of the metro accessibility impact on life satisfaction TA Na, WANG Qi 3(44) |
| Review of research hotspots in magnesium-based hydrogen storage materials in 2023 ZOU Jianxin, DING Wenjiang 1(204) | A review on measurement and differentiation of equity in urban public transport accessibility CHEN Huiling, YANG Xueke, WANG Wulin 3(53) |
| Review of technological hotspots of unmanned aerial vehicle in 2023 DUAN Haibin, MEI Yu, ZHAO Yanjie, HUO Mengzhen, NIU Yifeng, WANG Yin, YUAN Wanmai, DENG Yimin, FAN Yanming, ZHU Jihong, LI Xuan, LUO Delin 1(217) | A review of neighborhood environment effects on leisure time physical activity from a health perspective LI Yuhan, SHEN Yue 3(63) |
| Review of 2023 cybersecurity technology hotspots FENG Dengguo, LIAN Yifeng 1(232) | Review on measurement and assessment methods for urban walking environment in the context of "human-oriented turn" YANG Wenyue, ZHU Yuxian 3(75) |
| Memorable sounds of quantum information in 2023 LI Chuanfeng 1(245) | Customized bus path planning and system evaluation considering equity LIU Kai, WANG Jing, LIAN Zhirui, WANG Jiangbo 3(89) |
| Review on hot topics of large generative AI models DENG Jiawen, REN Fuji 1(266) | Research on the identification method of urban transportation equity XIE Bo, LI Han 3(97) |
| Annual review of advances of full homomorphic encryption technology FAN Ruiqi, CHEN Mingzhi, NIU Xinli, DONG Wenkuo, LI Xiaolin, LIU Shuo, LIU Jing, ZHAO Ming, CAI Jiayue, YAN Wei, ZHU Shuyong, ZHENG Kewei, XU Peng, HAO Qinfen, SUN Ninghui 1(286) | A review on the association between built environment and obesity PENG Ke, JIA Yihe, LIANG Yinxu, WEI Yujiao, LIAO Guixian 3(107) |
| Review on hot spots of extended reality(XR) in 2023 FAN Liya, MA Jieyuan, LIU Xitao, WANG Yiyin, SUN Jinyu 1(296) | Research progress on low-carbon technologies in cement manufacturing industry SHEN Honghai, LIU Yu, ZHENG Yan, GONG Xianzheng 4(21) |
| Review on urban AI hotspots in 2023 YAO Chong, ZHEN Feng, XI Guangliang 1(306) | Research progress of ionic liquids screening for gases captre and separation by COSMO-RS method JIAO Mengqing, ZHANG Ruixue, QI Letian, ZHAO Nan 4(31) |
| Hotspots of industrial control system security in 2023 CHENG Peng, ZHANG Zhenyong, CHE Xin, CHEN Jiming 1(314) | Research progress on influencing factors and coupling process of anaerobic ammonia oxidation technology LUO Anteng, WU Lina, HE Shuhang, JIA Chunfang, ZHANG Yulin, YIN Jian 4(40) |
| The development of post-quantum cryptography algorithm and chip design LIU Dongsheng, LI Aobo, HU Ang, LU Jiahao, HUANG Tianze, YANG Shuo, | Research advance in disposal methods and life cycle assessment of waste electronic and electrical products GONG Hanfang, DU Shiwei, GAO Feng, GONG Xianzheng, CHI Xiaoguang 4(52) |
| | Research progress on the disposal and recovery of waste SCR denitrification catalys HUANG Yanwei, ZHU Yuanfei, YANG Xiuhong, ZHANG Yingchun 4(62) |
| | Research on strategic mineral resource inventory, supply-demand |

- situation and countermeasures LI Yuwei 5(26)
- Comparison and trade analysis of strategic minerals between China and Russia ZHANG Yali, CHEN Congxi, SUI Yanhui, SUN Chunqiang 5(38)
- On the current situation and resource situation of molybdenum mining development and utilization in China LI Zheng, WU Qi, ZHANG Bixin, CHEN Congxi, WU Chuguo, GAO Yu, QIU Weiwei, WANG Nan 5(47)
- Domestic supply-demand situation of nickel and suggested countermeasures in China WU Qi, LI Zheng, WANG Nan, CHEN Congxi, WU Chuguo, GAO Yu, ZHU Xianyun, QI Shuhua 5(53)
- Composition and evolution of the nickel global governance framework and the participation path of China HAO Hongchang, WANG Anjian, MA Zhe, HAN Mei 5(61)
- Anatomy of global governance system of cobalt and China's path to participation ... YUAN Xiaojing, WANG Anjian, MA Zhe 5(70)
- Historical evolution, current status, realistic challenges, and China's strategy of the global governance system of lithium resources WEI Jiangqiao, WANG Anjian, MA Zhe, HAN Mei 5(81)
- Rising imbalance between supply and demand of strategic metal minerals: A study based on wind power industry DUAN Yue, GE Jianping 5(92)
- International comparison and path study of China's transportation modernization ZHAO Xijun, CHEN Xiaobo, GUO Jianfeng, LIU Siyao 6(25)
- Food Security with the Chinese Path to Modernization: Course of Practice and Path to Enhancement BA Xuezheng, ZHONG Yu 6(35)
- Accelerating the modernization of noise control system in China WEI Xinyu, ZHANG Ailing, MAO Yuru, YANG Jun, ZHANG Lijuan, WANG Jie, WANG Shiqiang 6(42)
- History and trends of urban planning and management modernization in China HUANG Jingxiong, DANG Anrong, LI Xiangyu, WENG Yang 6(51)
- On the establishment and development of the discipline of innovation strategy in China WU Jinxi 6(61)
- Problem awareness of ethical governance of science and technology from the perspective of Chinese path to modernization WANG Shuo, WEN Kanxiao, LI Zhengfeng 6(69)
- Scientific and technological action ideas and countermeasures to achieve dual carbon goals driven by innovation SHAO Chaofeng, ZHAN Xuesong, CHE Beibei 7(15)
- Economic assessment of China's power supply reliability QU Shen, WANG Qianzi, LIN Jin, ZHANG Jiaqi, BEN Yawen, ZHOU Qi 7(25)
- A collaborative development framework of coal-related resources under carbon peaking and carbon neutrality goals WANG Fangtian, ZHANG Chenkai, ZHANG Cun, JIA Sheng 7(40)
- Water-land-energy nexus analysis of coal-based cities: A case study of Huainan YE Yuanyuan, WU Huijun, WANG Qianqian, DAI Chengjuan 7(56)
- On the impact of technological progress in grain production on carbon emission intensity and its action mechanism YAN Haowei, MU Yueying 7(66)
- On factors influencing the acreage of staple crops in China: Evidence from a meta-analysis LI Rongqiang, CHEN Xuan, SHI Longzhong 7(76)
- Analysis of carbon sequestration service effects in Inner Mongolia ecological barrier zone LIU Jingya, QIN Keyu, DONG Zhanfeng 7(84)
- Growth potential of carbon sequestration and carbon sinks increase in forest and grass ecosystem in China CHEN Wenhui, LI Hua 7(93)
- Impact of carbon barrier policies from western developed countries on China and the response strategies REN Yanhong, NI Weiqi, GU Siting, LI Xiaoliang, DONG Zhanfeng 7(103)
- Development and future of dual-beam super-resolution lithographic technology XIE Dale, AI Xingxing, GAN Zongsong 8(21)
- Development status and future prospect of the wide band-gap semiconductors GAO Shuang, ZHENG Yuting, ZHANG Zhiguo 8(29)
- Research status and progress of dynamic infrared camouflage technology XU Gaoping, MA Zhi, DONG Shibo, WANG Panyu, CHEN Xiaoyu, ZHOU Mingxing, ZHANG Leipeng 8(39)
- Research progress on key technologies of soft manipulator FU Min, WANG Peng, WANG Chengmeng, CAO Zhong, CHEN Jiankun 8(48)
- Research progress of 3D printing of bionic damping materials YIN Nian, WANG Jianping, CHEN Gengbiao, YI Jijun 8(63)
- Research progress of ischemia-free organ transplantation LI Yefu, ZHANG Mingxi, WU Shaohai, CHEN Honghui, HUANG Jinbo, LU Changtao, YAO Yao, ZHAO Qiang, HE Xiaoshun 8(76)
- Future trends and impact on China of "United States government national standards strategy for critical and emerging technology" SUN Hongjun, ZHANG Ming, CHENG Yu, GAN Keqin, HUANG Juxiu 8(83)
- On interaction between cloud main chain and edge side chain based on cloud-edge collaboration ZHAO Zhiyu, XIE Linjiang, GENG Zhenwei, YANG Benfu, LI Li, LUO Tao, YANG Pengsheng 9(17)
- An intelligent electricity platform based on edge computing and blockchain integration YANG Kaixing, MAN Hongren, LIU Xiu, CHEN Chen, LIU Xueping, LI Jinyuan,

| | |
|--|--|
| LI Wanqing, LI Zhengxuan 9(26) | The three levels of scientific research..... XUE Qikun 12(14) |
| An architecture for fusing cloud-edge collaboration and blockchain LI Shenzhang, YANG Zhengyu, LI Li, MA Xinkun, WU Wei, LI Liangjing, ZHANG Yibin, ZHOU Zhixun 9(39) | Developing of future fiber materials guided by new quality productive force ZHU Meifang 12(15) |
| Efficient application management and control method for container- based cloud edge ZHANG Jianwen, MAO Zhengxiong, JIANG Ying, HUANG Shifeng, ZHANG Jinsong, YANG Benfu, YANG Shijun 9(51) | Developing new productive forces through technological innovation and stimulating new momentum for the digital economy CHEN Zhongyue 12(16) |
| Blockchain lightweight application research and implementation as applied to edge IoT devices HENG Xingchen, PU Gang, LI Ling, CHEN Da, ZHANG Jinsong, ZHOU Zhixun, JIANG Wenzhe 9(60) | Research on the practical path of promoting high-quality development of nuclear power through new productive forces YE Qizhen, SU Gang, HUANG Wen, ZHAO Wanguang, RUAN Tianyue, XIONG Kai, LIN Xianjun 12(17) |
| Wind turbine blade internal defect detection based on improved YOLOv5s model ZHANG Chengyi, GUO He 9(67) | The development of PAN-based carbon fibers and the latest progress of the third-generation high performance carbon fibers at home and abroad QIAN Xin, WANG Xuefei, ZHANG Yonggang 12(27) |
| Wind turbine blade internal cavity defect detection algorithm based on improved SSD model GUO He 9(76) | The research status and development trends of generative artificial intelligence CHE Lu, ZHANG Zhiqiang, ZHOU Jinjia, LI Lei 12(35) |
| On scientific thinking in pure-fundamental research YANG Wencai 10(18) | Evolution of general large models REN Fuji, ZHANG Yanru 12(44) |
| Philosopher and scientist: The setter of landmarks in the history of humanthought LI Xingmin 10(24) | Multi-omics big data and medical advancements LIU Siyang, LIN Xingchen, CHENG Si, WANG Chaolong, LI Hao 12(51) |
| The dynamical mode of scientific progress Hao Liuxiang 10(27) | Disease dynamic risk prediction modeling methods and precision prevention SONG Yuxin, YE Qian, ZHAO Mengsheng, ZHANG Longyao, WEI Yongyue 12(75) |
| The intelligent era calls for new research methods LI Guojie 10(40) | Challenges and development trend of intelligent robot in pipe lifting deep sea mining system SHEN Yijun, ZHANG Weifeng, ZHOU Jianyi, QUAN Jiaxin, LI Wenqing, LIU Yuefan, ZHANG Ruiyong, LI Meng 12(92) |
| The methodology of physics in pursuing the beauty of truth: From the falsifiability of science to Occam's razor principle SUN Changpu 10(46) | The research status and application progress of orbital angular momentum wave metasurface SI Liming, CHEN Lulu, SUN Houjun, LÜ Xin 12(107) |
| Understanding the three giant leaps of scientific methodology from the development of astronomy and physics ZHANG Shuangnan 10(55) | Research progress on direct catalytic oxidation of coalbed methane to methanol YUAN Liang, AN Shengxin, XUE Sheng, ZHANG Tong, ZHAO Shuaibo 12(125) |
| On the originality of scientific findings in life sciences: Acquisition and evaluation CHANG Zengyi 10(65) | Research progress on the hotspots of porous media science LIU Yuewu, DING Jiuge, CUI Chunxue 12(143) |
| Exploring the viability of implementing IOD analysis in emerging intersectional research: A methodological and conceptual inquiry CHEN Yinghua, CHEN Yanan, CHEN An 10(74) | Embodied cognitive intelligence framework of unmanned autonomous systems SUN Changyin, MU Chaoxu, LIU Wenzhang, WANG Xiao 12(157) |
| Occurrence characteristics, treatment status and prevention and control strategies of new pollutants in urban sludge in China ... LI Jiang, ZOU Xiaoshuang, WANG Bin, HOU Li'an 11(18) | Research progress on the collaborative control of the human- machine fusion heterogeneous multi-agent based on temporal logic tasks ZHANG Xin'ao, FANG Hao, ZHAO Xinyue, CHEN Zhongyao, KE Weiling 12(167) |
| Environmental pollution prevention and control strategies of the emerging contaminants: Antibiotic fermentation residues ZHOU Jieya, HOU Li'an, TIAN Shulei, WANG Xuming 11(29) | Thermal runaway and prevention of lithium-ion batteries LI Cunpu, TANG Xiaoxia, WEI Zidong 12(178) |
| Research progress on occurrence characteristics and removal technologies of emerging contaminants in urban sewage treatment plants FENG Taotao, WANG Bin, LI Jiang, WANG Tao, XU Xiaoyi, HOU Li'an 11(36) | Trends of global seed industry and suggestions on innovative development of seed industry in China |
| Enrichment of benzopyrene anaerobic degrading bacteria and optimization of its conditions YI Qianwen, XIAO Fang, ZOU Xiaoshuang, LI Jiang, ZHANG Yuntao, DAI Yongheng, WANG Bin, HOU Li'an 11(47) | |

- CHENG Hua, WANG Gangyi 12(193)
- Overview on research progress of typical intelligent equipment in marine engineering YAN Jun, SU Qi, XU Qi, YANG Jianye, CHEN Jinlong, LU Hailong, WU Wenhua 13(16)
- Crack extension identification of ocean platform structure by gradient boosting regression tree LI Yang, SU Xin, DAI Tongtong, ZHANG Qi, HUANG Yi, JIA Ziguang 13(27)
- Isogeometric analysis for free vibration of functionally graded plates with complex cutouts using spectral displacement formulation YANG Shaowei, SUN Xianbo, CAI Zhiqin, LU Hailong, YANG Zhixun 13(36)
- Characteristic analysis of the coupling stress-electric field of metal pipe corrosion under marine environment XIA Jiangmin, DING Jianbo, SU Liyang, ZHANG Yuhang, ZHANG Dan 13(48)
- Random seismic response analysis of LNG storage tanks based on pseudo excitation method LIU Fupeng, YE Zhongzhi, SUN Xiaoxu, QIN Yuliang, WANG Lijia, YU Jianxing, WANG Xiaohu, LEI Ming, LI Haoran 13(54)
- Experimental study on vortex-induced vibration of catenary flexible riser under coupling effect of platform motion ZHU Hongjun, LIU Wenli, SONG Jinze, GAO Yue 13(62)
- Review of experimental testing technology of LNG cryogenic flexible hoses YING Xipeng, YAN Jun, ZHANG Kailun, CAO Huixin, BU Yufeng, LU Qingzhen, YANG Zhixun 13(73)
- Prediction of bending deformation characteristics of flexible tubular carcass layer bending with dimensional analysis WANG Xinyue, YAN Jun, YUAN Zhenqin, LI Wenbo, LU Hailong, CHEN Jinlong 13(86)
- Deep learning based catenary single point mooring design parameters prediction SUN Qiang, LI Yan, PENG Dongsheng, WANG Yuxin, YAN Jun, YUE Qianjin, ZHONG Wanxie 13(95)
- Structural calculation and analysis of the unloading arm of liquefied natural gas and the reliability research of the emergency release system YANG Liang, XIAO Li, XU Jiawei, HAO Sijia, QIU Zaoyang, FAN Jiakun, GAI Xiaogang, CHEN Ju 13(105)
- On flow characteristics of LNG cryogenic hoses based on structural features LIU Miao'er, LI Fangqiu, CHENG Hao, LI Xinxin 13(118)
- Design and application of intelligent monitoring and scheduling system for smart ocean emergency communication network ZHOU Xue, JIN Shangxi, XIE Shuo, YAN Jianfeng, WANG Xiaorui, MENG Junfeng, OUYAN Zhaohong, HUANG Wanning 13(125)
- Development and prospect of underwater archaeology in China SUN Jian 14(38)
- Chinese deep sea archaeology development trilogy SONG Jianzhong 14(48)
- Research and application progress of underwater archaeological vehicles GUO Wei, XU Gaofei, WANG Minjian, LI Bin, GAO Sen, YUAN Bo 14(61)
- The trends of underwater archaeological exploration technology outside of China LI Bin 14(73)
- Application of integrated marine survey technology in the salvage of Changjiang Kou No.2 shipwreck YU Xiaogang, LIANG Guoqing, LIU Zhibo, SUI Haichen 14(81)
- High-precision 3D terrain detection technology of underwater shipwreck: A case study of Laoniue reef shipwreck LIU Boran, XU Jiang, FANG Xudong, HU Yi, WANG Liming 14(91)
- Application of 3D synthetic aperture technology in underwater shallow buried target detection HE Huizhong, ZHANG Zhongyi, XIE Anyuan, CHEN Dong, LI Zhenyuan, HE Xi 14(99)
- Practice and reflection of systematic regional survey in underwater archaeology: Taking the sea area of Yushan Islands for example WANG Guangyuan, LI Bin, LIN Guocong 14(108)
- Application of ultrashort baseline positioning system and acoustic doppler current profiler in underwater archaeology of the shipwreck by Shengbeiyu Island HUANG Zepeng, RAN Delu, RUAN Yonghao 14(116)
- Archaeological observation of shipwrecks found along the coast of China since the Song and Yuan dynasties CHEN Hao, LIANG Guoqing 14(125)
- Hydrogen Chinese medicine: An emerging research direction in the field of hydrogen medicine YANG Haiyan, WANG Weiyang, YING Lean, SUN Zhixuan, DING Zhiguang, DING Wenjiang 15(15)
- Research progress and future prospects of hydrogen in agriculture YANG Haiyan, ZHANG Qiuyu, LING Xiang, LIU Yaqian, PAN Qifang, HAN Jinglong, DING Wenjiang 15(22)
- Development and application prospect of large-scale solid-state hydrogen storage and transportation technology for hydrogen metallurgy WEI Wei, RAO Wentao 15(40)
- Research progress on slush hydrogen technology CHEN Shujun, WANG Kecheng, FU Yue, ZHANG Lin 15(49)
- The effects of seed coating by magnesium hydrides on germination and seedling growth of soybeans YANG Haiyan, ZHANG Qiuyu, PAN Qifang, CHU Shaohua, YANG Xijia, HAN Jinglong, ZHOU Pei, DING Wenjiang 15(58)
- Exploration process, practical experience, and policy prospects: advancement of agricultural science and technology in China KUANG Yuanpei, YANG Peiyu 16(14)
- Contribution decomposition and path analysis of China's grain production increase WANG Yiting, WEN Shurong,

GUO Wenshuai, ZHONG Yu 16(26)

A new path for China's grain production capacity improvement from the perspective of technological progress bias: A case study of the five major provinces with net grain transfer
 SUN Zhongye, YANG Chuanyu 16(40)

Study on the impact of agricultural science and technology innovation on the resilience of food production under the "double-cycle" development pattern
 PENG Changsheng, HUANG Xingyu, WANG Peng, ZHONG Yu 16(47)

Theoretical logic and implementation mechanism of technological innovation empowering high quality development of the grain industry HAN Li, ZHAN Zhaolei 16(58)

Study on promoting the coordination of science and technology of grain industry at three levels DU Lei 16(66)

Green and low-carbon food production from the perspective of pollution reduction and carbon emission reduction: Practical basis, main problems, and optimization pathways
 MING Ruoyu, LI Fanlue, HE Ke 16(72)

The impact of extreme climate on China's grain production and countermeasures XU Hang, LIU Sheng, LIU Lei, LIU Xuejun 16(82)

Research on adaptive behavior of farmers in response to climate change under the constraint of the "dual carbon" target
 CHEN Su, CHEN Yikai 16(91)

Experience and reference of EU food system research and development innovation support policies
 CUI Haixia, GAO Yidan, ZONG Yixiang 16(98)

Research and prospects on the pathways of national parks contributing to biodiversity conservation in China
 ZHANG Jingjing, XU Jiliang 18(20)

Major progress and suggestions on biodiversity conservation in China in the new era CAO Mingchang, YANG Huan, LI Jingting, YU Dandan, FANG Lei 18(28)

Establishment and management of national parks under carbon neutrality goal in China WANG Wei 18(37)

Progress in ecological security research in the context of biodiversity and sustainable development
 ZHENG Shuyuan, LIU Guohua, WAN Lingfan, ZHAO Junyan, LI Jiajia, ZUO Lingli, SU Xukun 18(46)

International experiences and implications of ecological conservation theory and technologies in national parks: A comparative study of the United States, Canada and France
 WEI Yu, ZUO Aojie, QIAO Na 18(58)

Realizing the concept of public welfare for all in China's national parks: Current situation, problems and recommendations
 ZHU Miao, TANG Chunfang, TANG Ling, ZHANG Huizhi, HUANG Baorong 18(66)

Strategic consideration of China's energy transition under the "dual-carbon" goal WANG Rong, CHEN Zhiye, ZENG Jiawei, WANG Yijing, CAO Junji, TANG Xu, ZHANG Renhe 19(10)

Projection of climate change risk under carbon peaking and carbon neutrality goals: From global level to regional level
 CHENG Fangyuan, ZUO Zhiyan, QIAO Liang, ZHANG Kaiwen, CHANG Meiyu 19(20)

Capacity, spatial patterns and benefits assessment of photovoltaic power under carbon neutrality goal in China
 ZENG Jiawei, CHEN Zhiye, WANG Yijing, WANG Rong 19(34)

Capacity of wind power generation and impacts of electricity transmission and energy storage on achieving "dual carbon" goal in China CHEN Zhiye, ZENG Jiawei, WANG Yijing, WANG Rong 19(47)

Impact of "double carbon" goal on urban air quality in China
 WANG Yichen, DONG Lu, ZHANG Linru, XIE Meiyong, HAN Xiao, CAO Junji 19(59)

Expectation of green transformation of shipping industry in China under carbon peaking and carbon neutrality goals
 ZHANG Yan, QIAN Haoqi, LI Quan 19(66)

China's climate and extreme climate changes under the global carbon neutrality scenario CAI Ziyi, YOU Qinglong, WU Fangying, JIANG Zhihong, ZHAI Panmao 19(73)

Impact of global supply chain transfer on China's "dual-carbon" goals WANG Runyu, HUANG Tao, LING Zaili, REN Ji, WEI Zijian, SONG Shijie, MA Jianmin 19(85)

Establishing and implementing a health-centred climate governance strategy OUYANG Huiling, TANG Xu, ZHANG Renhe 19(98)

Research on perfecting the system of establishing quiet areas in China WEI Xinyu, ZHAO Guiying, WANG Erqi, YAN Ziwei, MAO Yuru, PENG Lixin 20(14)

The current situation and development of noise automatic monitoring in China MAO Yuru, WANG Yun, ZHANG Jianxun 20(23)

Research progress of acoustic materials and the application in industrial noise pollution control FENG Tao, YOU Xuanhui, WANG Jie, WANG Jing 20(32)

Research on dynamic vibration absorption technology of power equipment based on comprehensive optimization method
 GENG Mingxin, MA Jiangang, BAI Xiaochun, SUN Qiang, SHEN Chen, WEI Xinyu 20(48)

Study on the prevention and control measures of construction noise pollution in China GUO Hong, WEI Wei 20(55)

Research and prospect on noise control of high speed railways in China LIU Lanhua, LI Zhiqiang, ZHOU Tiejun, WU Xiangyang 20(60)

Progress on prevention and control of urban rail transit noise pollution HU Wencheng, LIU Lei, KANG Zhongxu, SONG Ruixiang, ZHANG Huijuan, LIU Qiang 20(70)

Current status and development trends of road traffic noise control

- technology YUAN Minmin, WANG Yanqin,
SHAO Shegang, LI Mingliang 20(85)
- Research on the single-vehicle noise model in road traffic noise
prediction ZHANG Lijuan, WANG Jie, YANG Jie,
WANG Beibei, ZHAO Guiying 20(95)
- International comparison and experience of aircraft noise control
around airports WANG Yun, WEI Xinyu,
WU Xiaoyan, ZHAO Guiying 20(103)
- The development and application of noise map ping technology in
the control and supervision of noise pollution
..... LIU Lei, HU Wencheng,
ZHAO Shanshan, FAN Xiaojian 20(110)
- Progress and prospects of real world data quality assessment methods
in traditional Chinese medicine ... ZHANG Zedan, WANG Bin,
ZHANG Wen, ZHAO Ran, HE Chang,
WEN Xiaoxiao, WEN Tiancai 21(13)
- Construction of clinical practice guidelines for TCM intervention in
coronary heart disease and analysis of real world evidence
application status ... WANG Kewen, LUO Wenye, ZHANG Jing,
HAO Xiuwei, KONG Dezhao 21(20)
- Research progress on regulation of neurotransmitters by traditional
Chinese and Western medicines in tic disorder treatment
..... CHEN Huimin, GONG Yu, QIAN Qiaoqiao,
LIU Zhisheng, HE Liyun 21(39)
- Protective effect of Chinese medicine on progression of renal function
in patients with chronic kidney disease stages 3-5
..... ZHU Peiqi, HE Jiayi, XIE Jiadong, ZHAO Jing,
TANG Ruijie, SUN Wei, HE Weiming 21(47)
- Thinking and practice of real world clinical study of traditional
Chinese medicine based on big data knowledge engineering
..... SUN Ting, ZHANG Pan, SONG Shujie, LI Jun,
LI Xiaodong, SHEN Shaowu, XIAO Yong, TIAN Shuanggui,
HUANG Ying, MAO Shusong 21(55)
- Research on inheritance and transformation methods of famous
classical prescriptions based on medical records data
..... FANG Yuxuan, SHAO Mingyi, ZHANG Rongrong,
ZHAO Ruixia, LIU Yanan, CUI Hongyan 21(66)
- Scientific problem finding research based on real world data
..... LAI Keyun, CHEN Xiao, SONG Hujie, LAI Changsheng,
WANG Kaiyue, BAI Yang, ZHANG Ye, YI Wenhui,
LIU Haiyang, RAN Jingchun, TAN Fuxiong, TIAN Yali,
WANG Zhenguo, WANG Guangjun 21(73)
- An efficacy evaluation method for analyzing composite endpoints
based on patient preference and it's implications for traditional
Chinese medicine LI Shuangjing, YAN Shiyan,
LU Ying 21(87)
- Preliminary exploration of real world study and prescription
validation based on traditional Chinese medicine clinical data of
constipation NI Yucheng, ZHU Xi, PAN Sizhe,
ZHU Yu'nan, LIU Hua, LI Jiacheng 21(94)
- Exploring integration of acupuncture and whole-brain language
therapy for childhood language disorders from a neuroscientific
perspective HE Yuan, ZHANG Ningbo, GAO Ming,
YANG Chong, SONG Hujie, QIAO Cheng, ZHAO Liang 21(102)
- Effect of treatment frequency of Tiaojing Cuyun acupuncture on
clinical efficacy of premature ovarian insufficiency
..... ZHUO Yuanyuan, JIANG Lijiao, LUO Yan,
HUANG Xingxian, YANG Zhuoxin 21(114)
- Observation of clinical effect of Xingpi capsule on irritable bowel
syndrome with predominant diarrhea
..... ZHANG Qi, ZHANG Di, QIN Yuning, WANG Xin,
AI Yanke, LV Xiaoying, SHENG Yudong,
ZHAO Tianyi, LI Hongjiao 21(122)
- A queue study on prevention of chemotherapy-induced
myelosuppression in solid tumor patients using qi-invigorating
and blood-nourishing therapy HE Wenting, ZUO Sen,
XUAN Yanhong, ZHANG Hongliang,
HU Lan, ZHANG Tong 21(132)
- Predictive analysis of quality markers (Q-Marker) of shentong zhuyu
decoction YANG Yunyun, CHEN Qiqing, WANG Jianwei,
MA Dong, AN Dehao, WANG Huasheng,
ZHU Bao, TIAN Guangfang 21(139)
- The study on the formula characteristics of Zhengan Xifeng
decoction in the treatment of hypertension based on machine
learning models HUAN Jiaming, CHEN Xiaoqing,
YANG Wenqing, LI Jie, HUA Zhen,
WANG Yifei, LI Yunlun 21(149)
- Ethical considerations of real world research and its consideration in
the clinical practice of traditional Chinese medicine
..... LI Ruoqi, DUAN Wenhui, WANG Dong,
XUE Yiming, WANG Peichen, ZI Mingjie 21(163)
- Exploring the significant value of health economics evaluations
acupuncture for international promotion
..... ZENG Dian, GUO Ran, LIU Yuanli,
HE Liyun, LIU Baoyan 21(170)
- Inspiration from the real world research methods of Chinese
prescription medicine under the model of "Drug Seller" and
"Ledger" SU Wen, PENG Shaoyan,
NISHIMURA Ichiro 21(180)
- Clinical application of autologous chondrocyte transplantation in the
treatment of articular cartilage degeneration
..... HOU Jianlei, LIU Pengwei, JIANG Chuan,
ZHANG Zhongwen 22(15)
- Effect of non-platelet RNA-containing particles in umbilical cord
blood on lung cancer A549 cells
..... ZHANG Xuelin, YUN Sheng, SHI Xiuhuan 22(23)
- Health promotion of γ -aminobutyric acid supplements in chronic
disease population DING Yi, WANG Jianing,

- DING Haitao, AI Hua 22(30)
Protective effect and clinical value of closure of patent foramen ovale on the elderly population with stroke risk
..... XIA Cheng, ZHOU Chiheng, XIANG Shiqiang 22(43)
Efficacy and advantages of cognitive-behavioral therapy in elderly depression patients complicated with physical diseases
..... LI Ping, SUN Zhigang, XU Manhua, HE Lanying, DU Yimin, WANG Lifeng, ZHANG Pei, SONG Lihua 22(49)
Analysis of the therapeutic effect of single condylar replacement and MIS-TKA in the treatment of elderly knee osteoarthritis
..... WANG Yongxiang, BAO Huricha, WEI Baogang, MA Bingxian, NIU Xiaobo, WANG Yifan, QI Yansong, XU Yongsheng 22(56)
Protective mechanism of probiotic supplements on oxidative stress levels in high-level athletes
..... NING Fangtang, MA Guoqiang, WANG Yuru 22(63)
Application value of Chinese medicine in postoperative treatment of perimenopausal endometriosis ZHENG Juan, HAN Ying, WANG Danning, WU Dan, CONG Hui Fang 22(70)
Application value of Chinese medicine comprehensive rehabilitation in postoperative recovery of elderly patients with intertrochanteric fractures surgery WEI Pengyi, QIAO Gang, SHAO Wei, CUI Weijia, FENG Zhaofeng, GU Yatong, ZHANG Yu 22(76)
Review of DIKWP application research for human-machine integration MEI Yingtian, DUAN Yucong 23(41)
Research on defense style of intelligent navigation warfare
..... YANG Fan, WU Zhongwang, WANG Xiaohai, LI Minggui 23(54)
Intelligence that spans disciplines, fields, cultures, and civilizations
..... LIU Wei, ZOU Yangyang, SUN Weiwei 23(62)
Research status and prospect of artificial intelligence in psychological assessment YAO Feng, WANG Xue, WEI Zhengde, ZHANG Xiaochu 23(70)
A preliminary analysis of the potential relevance between artificial intelligence technological catch-up and emerging risks
..... LI Fang, WANG Jingjing, HUANG Ying, JIANG Lidian 23(79)
Adoption under perceived risks: Analysis of face recognition payment technology acceptance
..... LI Wenwen, HAN Wei, CHEN An 23(85)
Research progress on cooling of electronic equipment based on liquid metal convection CHANG Xiangting, DONG Wei, HAN Junjie, DONG Jinxi, LIU Zhihu, ZHAO Hang 24(30)
Application and development of flat heat pipe in spacecraft thermal control LENG Yakun, ZHANG Xu, ZHEN Hualong, LIU Yingchun, WANG Zhongqi, PU Liang 24(46)
Cascade heating strategy with multiple heat sources distributed based on waste heat recycling for electric vehicles

- DING Peng, ZHANG Meijuan, ZHANG Pengbo, LI Meng, YU Chunming 24(58)
Evolution and damage mechanism of pore structure in granite after high-temperature and liquid nitrogen cycling
..... WANG Zhenqiang, DI Jia, WU Yang, LI Yan, GU Zhi, GAO Shuang 24(70)
Magnetic power loss of NdFeB thermoseeds in alternating magnetic field for magnetic induction hyperthermia
..... LI Jing, SHI Baiyuan, LIN Zixin, XU Suhua 24(79)

Reviews

- Research progress of imine covalent organic frameworks
..... CHU Zhengkun, LIU Jie 2(67)
Review of battery life prediction and energy control management strategies for hybrid electric vehicles
..... WU Xudong, WANG Jingyue, XUE Chunwei, ZHENG Junwen, LEI Hu, WANG Junnian 2(79)
Current situation and countermeasures of iron tailings resource utilization ZHANG Zhenguang, WANG Yue, CHEN Jundian, GAO Qian 2(90)
Application status and development suggestions of intelligent mine robots FU Ensan 2(104)
The research status of production technology of casting and spinning aluminum alloy wheels YUE Fengli, YAN Weihao, ZHANG Mengxiao, SONG Hongwu, ZHANG Shihong 3(123)
Application and progress of quantum chemical methods in the mechanism of spontaneous coal combustion
..... ZHANG Wei, ZANG Liyan, LI Jing 4(73)
Review on hydrogen storage properties and improvement methods of the sodium aluminum hydride TONG Xiaogang, LI Zhipeng, CHENG Junfeng 4(84)
Smart ocean digital twin technology and its application
..... ZHAO Longfei, JIANG Xiaoyi, HONG Yu, SUN Miao, WANG Yi, KANG Linchong, CAO Lei 4(91)
Progresses of pesticide reduction techniques and the synergistic effects on the control of rice leafhoppers *Cnaphalocrocis medinalis* CHEN Chengyu, ZHAO Yunxia, TANG Yiting, ZHANG Xuefeng, ZHANG Kai, CHE Guojing, ZHU Qing, ZHANG Xiao, LIU Yuan, LIU Xianjin 6(79)
Comparative study on unmanned aircraft system traffic management systems at home and abroad LI Zhangping, MA Yijun 8(91)
A survey of model-based reliability and safety analysis methods ZHANG Jinhui, ZHAO Yan, MAO Yinxuan, LU Zhiang, YANG Zhuopeng, ZHANG Longxi 8(101)
Research progress of polyurethane foam modified by carbon nano-materials LIAN Zhaolong, LI Xiaoyu, CHEN Peng, SUN Bin, XU Xinyu, HUANG Yudong, WANG Caifeng 9(85)
Research progress of chronic injury of muscle tissue

- SUN Hao, HE Ling, LIU Dan 9(94)
- Research progress of extracorporeal shock wave in osteoarthritis the treatment and its mechanism LIANG Jiaming, CHEN Xin, MA Zhiyan, ZHANG Yingyu, ZHAO Linlin, LIU Yingying, LIU Yajun 11(58)
- Research progress of anti-inflammatory drugs in osteoarthritis treatment MA Zhiyan, HE Ziyi, LIANG Jiaming, ZHAO Linlin, ZHANG Yingyu, LIU Yingying, LIU Yajun 11(66)
- Research progress on detection and control method of citrus Huanglongbing ZHANG Tianyu, YANG Gairen, HE Xunyang, LIU Qiumei, LI Dejun 11(75)
- Research progress on diagnosis markers and treatment targets of Brucellosis WANG Bo, DING Haitao 11(84)
- On the development status and future direction of enhanced geothermal system experimental simulation equipment TANG Jiawei, LI Jingfeng, FANG Jie, LIU Yueyang, GUO Qiang, SHI Junjie, LI Jie 15(69)
- Progress and prospect of research on cognitive-friendly community construction DONG Wei, ZHAO Yuelei, DONG Yu, CAI Jiaqi 17(53)
- Research trends and prospects of sensory garden from a generalized accessibility perspective FENG Tianyi, JIA Weiyang 17(65)
- Research progress of uniform droplets formation technology WANG Tongju, ZHANG Qimei, ZHANG Wenqian, LEI Yongping, LIN jian, FU Hanguang 18(76)
- Application and research progress of light therapy in bipolar disorder LI Ping, MA Yantao 18(91)
- Research on the organization and management mode of distributed large cohort based on multi-agent cooperation: Taking EPIC-Europe as an example SUN Xuehui, LI Wei, ZHOU Sheng, XU Ping, XU Li 22(84)
- New reagents of containing fluorine and sulfur-containing in organic reactions WANG Naixing 23(98)
- Research progress of living heart and its application status PEI Yuyang, YU Tianshui 24(88)
- Research progress in the application of aggregation-induced emission materials in food safety field JIA Yuan, MENG Fanzhe, YANG Juxiang, LI Beibei 24(96)
- Papers**
- Influence of geological structural factors for coal and gas outburst MIAO Yanping, ZHENG Xuhe, WANG Hongliang, SHE Gang 2(111)
- Research on multi-protocol wireless data analysis and prediction of converter station based on improved particle swarm algorithm MAO Chunxiang, CHAI Bin, LIU Ruopeng 2(120)
- Material substance flow analysis of platinum in China LIU Sijie, LI Jinhui, GENG Yong, ZENG Xianlai 4(102)
- Studies on the influence factors on E_c and D_p of photocuring 3D printing photosensitive resin CHEN Jing, YANG Xiaoshuai, ZHANG Pengfei, ZHANG Aiping 4(112)
- Digitalization, carbon reduction costs and high-quality urban development with low-carbon SHEN Hongliang, SONG Simeng, LI Jie 6(86)
- Spatial characteristics and influencing factors of carbon emission intensity of construction industry in China XU Shuitai, LI Xiwei, DONG Xin 6(103)
- Study on anti-fatigue effect of high-definition transcranial direct current stimulation on forearm muscles of upper limbs LI Wenhua, HOU Yuxin, DONG Tongong, XIA Xuelian, GUO Feng 6(112)
- Development trend and layout tendency of patents of typical defense S/D innovation entities in the US ZENG Zhangxuyang, ZENG Li, LIU Shulei 7(115)
- Path planning of mobile robot using improved RRT_Connect algorithm SHI Xiaoxu, ZHANG Lieping, TANG Liu, DONG Luxi, PENG Jiansheng 8(111)
- Application of 3,5-difluoro-2,4,6-trinitroanisole in melt-cast carrier explosive WU Kai, JING Suming, HU Fei 9(102)
- Study on the transfer mechanism of Zdol lubricant on the surface of the head/disk FEI Jiawen, CHEN Yuxin, YANG Xiujie, NIE Kaixun, TANG Zhengqiang 11(92)
- Impact of forest park vegetation spatial configuration on cooling effect under Double Carbon Target: Taking Fuzhou Forest Park as an example LIU Donglan, DAI Zhongwei 15(82)
- Spatial-temporal differentiation and influencing factors of comprehensive energy efficiency in provinces along Silk Road Economic Belt: Based on ultra-efficient and geodetector models MA Yuan, ZHANG Tonglei 15(91)
- Performance evaluation analysis on patent output of national applied S&T research fund —Taking "water special project" funding as an example GAO Jiping, ZHAI Lihua 15(104)
- Effects of different sample shapes and sizes on stress rupture property of DZ406 superalloy ZHANG Li, ZHANG Shichao, GUO Jing 16(108)
- Reactor coolant pump status anomaly detection method based on multi-scale fully convolutional networks GONG An, WEI Jinming 16(114)
- Statistical detection, regional differences and dynamic evolution of energy poverty in China DING Yuying, GAO Zhigang, KE Han 17(74)
- Identification of age-inclusive spatial issues in large cities based on online public opinion and exploration of planning strategy: Taking the main urban area of Wuhan as an example HE Hui, ZHANG Qinghao, LIU Chang,

- XIE Chuting, RONG Sheng 17(87)
An evaluation method of technology popularization and application of integrated energy system based on digital portrait
..... LIANG Chen, MA Xiping, DONG Xiaoyang, LI Yaxin, LUO Li, XU Rui 17(97)
- Identification of critical metals and simulation of circular strategies under China's large-scale development in wind-power and solar-power sectors REN Kaipeng, TANG Xu 17(111)
- Landscape experiential evaluation of visually impaired groups based on spatial syntax HAN Linfei, SHEN Lu 17(125)
- Barrier-free environment evaluation of livability living streets based on the needs analysis of visually impaired population—A case of the historic district, Harbin DAI Jian, CHEN Xinlang, CHEN Lulu, WANG Chunqi 17(130)
- Entity alignment based on graph structure and element information fusion..... MA Haoran, Wang Jinhua 18(98)
- Spatial pattern evolution and location selection factors of Chinese marine high-tech enterprises CHEN Xiaolong, DI Qianbin, CHEN Keqi 18(110)
- Temperature effect analysis of additives in self-propagating forming aluminum alloy cylinder inner wall coating
..... GUAN Xiqiao, YANG Yanfeng, WANG Liang, HUANG Zhi, YU Yunlong, ZHOU Kaixuan, WANG Hao, JIN Guo 19(105)
- Clinical application of low morphine comprehensive analgesia in postoperative analgesia LI Jing, ZHU Xinwei, HUANG Bo, ZHANG Hua, ZANG Rui 19(113)
- Effect of heat treatment on microstructure and mechanical properties of laser clad high Co-Ni steel coating
..... QIN Renyao, ZHANG Guohui, CHEN Bingqing, LI Neng, LIU Wei, HUANG Shuai, GAO Chao, GUO Shaoqing 22(93)
- Mechanical and corrosion resistance analysis of self-propagating high-temperature synthetic ceramic lined oil pipes
..... GUAN Xiqiao, XIAO Fengyan, HUANG Zhi, XIE Weitao, WANG Shouze, WEI Shicheng 23(108)
- Characteristics of pore evolution in tight sandstone reservoirs of Yingcheng Formation-Shahezi Formation, Longfengshan Sub-sag in Changling fault depression, Songliao Basin
..... ZHU Xinda, QU Xiyu, YAN Zhen, MAO Shaohua 23(119)
- Automatic sentence segmentation and word segmentation for Liye Qin Bamboo manuscripts based on CRF model
..... FENG Huimin, GUO Shuaishuai, LIU Ming 23(135)
- Experimental study on the field detection methods of seismic water temperature observation instrument and its influence on the continuity of observation data
..... MING Xiaoran, LI Wenyi, WANG Zhongbiao, TIAN Xingyu, ZHU Chuandong, TANG Rong 24(106)
- Treatment efficiency of immobilized algal-bacterial symbiotic system

- on rural gray water LIU Yuankun, WANG Zhiwei, YU Haikuan 24(115)

Science and Technology Humanities

- Development of Phoenix car and its historical significance
..... HUANG Lirong 4(115)
- Ethical thinking on the application of AI in military
..... HE Jie, SUN Xiaoyu, ZHENG Rui, WANG Lanying 4(124)
- Whether the machine subject moral consciousness can be generated: The "internal approach" of the artificial intelligence machine ethical governance XIE Jing 8(120)
- Wang Xuan's technology foresight thought and innovative practice
..... YAN Jun, TAN Chao, CONG Zhongxiao 10(87)
- Academician Shi Yunyu's academic growth experience: The essence of mountaineering lies in the process of ascent
..... ZUO Kunlan, HUANG Jianliang, XIANG Qiangyu, GAO Wanying, WU Zongzhen, LIU Huan 10(94)
- Physicist Ding Xilin from the perspective of science communication
..... JIANG Feng, XIANG Anqiang 11(98)
- Ethical governance and legal regulation of human eggs trading
..... LIU Changqiu, ZUO Lin, GAO Wanqi 16(126)
- Zhou Guangzhao's support and care for young scientific and technological workers..... FENG Changgen 17(144)
- The pioneer and practitioner of the "Two Bombs and One Satellite" spirit: In memory of my mentor Zhou Guangzhao
..... WU Yueliang 17(146)
- Zhou Guangzhao's discussion on the "Two Bombs and One Satellite" spirit and Tsinghua University's educational philosophy
..... OUYANG Zhongcan 17(152)
- Zhou Guangzhao's strategic thought on the development of basic sciences ZHU Bangfen 17(154)
- Learning from Mr. Zhou Guangzhao's scientific spirit
..... SUN Changpu 17(157)
- Perseverance and dedication of unpopular subjects: Insights from the 2023 Nobel Prize in Physiology or Medicine
..... LI Quanxiu, SONG Xiaoda, ZHEN Cheng 18(124)
- "People's Scientist" Gu Fangzhou: A pioneer of polio eradication in China ZUO Kunlan, HUANG Jianliang, SUN Bo, LIU Huan 19(119)
- Yang Lan One on One* interview with Mr. Samuel Chao Chung Ting, a Nobel laureate..... 19(128)
- The spirit of Zhou Guangzhao and my scientific research practice
..... TAN Weihong 22(102)
- A few stories of Zhou Guangzhao leading the research on nuclear weapon theory WU Mingjing 22(106)
- A wise and short life of Roch, the gifted mathematician
..... DUAN Yuerui, WANG Shuhong 24(128)