

海洋环境科学

第 44 卷 第 1 期

2025 年 2 月

目 次

【北部湾生态环境】

互花米草入侵对广西北部湾盐沼湿地土壤微生物的影响

..... 徐惠民, 陈振华, 王俊健, 谭沉艳, 蒙泓吉, 戴梦菁, 张 燕, 丛丕福 (1)

钦州湾与上游河流的微塑料时空分布及影响因素分析 邓明月, 朱静敏, 王薛平, 厉国梁, 张超文, 鲁栋梁 (10)

防城港核电厂温排水对红树林群落特征影响分析

..... 李英花, 何斌源, 赖廷和, 李 梦, 莫珍妮, 朱 婷, 黄中坚, 宁秋云 (17)

北部湾北岸近海大型底栖动物群落结构与生态质量评价 曾鸿滨, 董建宇, 刘伟豪, 李北兴, 王学锋 (26)

广西典型海湾表层沉积物重金属赋存形态及潜在生态风险

..... 赵淑雯, 苏琼源, 黄亮亮, 温彩霞, 朱祖浩, 郑晶贝, 卢佳妮, 李 楠 (35)

【调查与研究】

新不列颠海沟轴部沉积物的放射性核素分布 孙诗晴, 张芬芬, 王亚松, 许云平, 杜金洲 (47)

烟台芝罘区北部海域表层沉积物粒度特征及其对沉积动力环境的指示作用

..... 马志颖, 王洪松, 袁庆政, 董华洋, 何 腾 (59)

高溶氧对黄铁矿-生物炭基人工湿地处理海水养殖尾水的影响研究

..... 邵月威, 吕 剑, 王建华, 张 翠, 武 君, 邓传燕, 初闻武 (67)

动态声呐在辽东湾近岸海域水母监测中的应用

..... 王 涛, 关春江, 代贤军, 寇鑫鑫, 滕文良, 王宪法, 杨 璐, 张警方, 康君峰, 姜 倩 (75)

无居民海岛保护性开发过程中生态脆弱性格局的时空演变——以珠海三角岛为例

..... 黄心怡, 杨旭楠, 张翠萍, 林海庆, 徐晓龙, 许玫英 (80)

南海西部不同粒径浮游动物碳氮稳定同位素研究 张文博, 黄洪辉, 巩秀玉, 刘华雪 (89)

2010—2021 年三都澳富营养化变化及污染物来源分析 林建国 (97)

【技术与方法】

基于小样本生成对抗网络的光学遥感影像溢油语义分割 刘 川, 马玉娟, 范剑超 (107)

福建全省海洋藻类养殖区高精度智能提取方法研究 陈红梅, 吴 婷, 林万强, 陈芸芝, 罗冬莲 (116)

基于粒子相对离散探测海洋中的物质输运结构——以海州湾为例

..... 刘耀民, 向旭昇, 张学庆, 于金珍, 熊 瑛 (126)

基于灰度共生矩阵的航海雷达图像海面风向反演算法 王 慧, 于大涛, 李诗语, 邱海洋, 朱志宇, 智鹏飞 (135)

基于改进 SOLOv2 算法的海滩影像水边线提取研究

..... 庞 坤, 朱 君, 王 楠, 孔腾飞, 戚洪帅, 雷 刚, 尹 航, 刘 根 (145)

【综述】

石油-黏土团聚体的特性及在溢油污染控制中的应用 夏文香, 王凯玖, 武书晓, 董亦奇, 侯佳颖, 王明丽 (152)

Contents

ecological environment of Beibu Gulf

- Effects of *Spartina alterniflora* invasion on soil microbial community structure in salt marsh wetland in Beibu Gulf, Guangxi
 XU Huimin, CHEN Zhenhua, WANG Junjian, TAN Chenyan, MENG Hongji, DAI Mengjing,
 ZHANG Yan, CONG Peifu (1)
- Spatiotemporal distribution and influencing factors of microplastics in Qinzhou bay and upstream rivers
 DENG Mingyue, ZHU Jingmin, WANG Xueping, LI Guoliang, ZHANG Chaowen, LU Dongliang (10)
- Effects of the thermal discharge from the Fangchenggang nuclear power plant on the community characteristics of mangroves
 LI Yinghua, HE Binyuan, LAI Tinghe, LI Meng, MO Zhenni, ZHU Ting, HUANG Zhongjian, NING Qiuyun (17)
- Community structure of macrobenthos and ecological quality evaluation in the northern coastal areas of the Beibu Gulf
 ZENG Hongbin, DONG Jianyu, LIU Weihao, LI Beixing, WANG Xuefeng (26)
- Speciation characteristics and potential ecological risks of heavy metal in surface sediments of the typical bay in Guangxi,
 China
 ZHAO Shuwen, SU Qiongyuan, HUANG Liangliang, WEN Caixia, ZHU Zuhao, ZHENG Jingbei,
 LU Jiani, LI Nan (35)

Investigation and Research

- Distribution of radionuclides in sediment columns from the axis of the New Britain Trench
 SUN Shiqing, ZHANG Fenfen, WANG Yasong, XU Yunping, DU Jinzhou (47)
- Grain size characteristics of surface sediments in the northern waters of Zhifu District, Yantai and their indications of the
 sedimentary dynamical environment
 MA Zhiying, WANG Hongsong, YUAN Qingzheng, DONG Huayang, HE Teng (59)
- Study on the effect of high dissolved oxygen on the treatment of marine aquaculture tail water by pyrite-biochar based
 constructed wetland
 SHAO Yuewei, LYU Jian, WANG Jianhua, ZHANG Cui, WU Jun, DENG Chuanyan, CHU Wenwu (67)
- The application of dynamic sonar in jellyfish monitoring in the nearshore waters of Liaodong Bay
 WANG Tao, GUAN Chunjiang, DAI Xianjun, KOU Jinxin, TENG Wenliang, WANG Xianfa, YANG Lu,
 ZHANG Jingfang, KANG Junfeng, JIANG Qian (75)
- Spatio-temporal evolution of ecological vulnerability pattern in the protective development of uninhabited islands -- Sanjiao
 Island (Zhuhai, China) as an example
 HUANG Xinyi, YANG Xunan, ZHANG Cuiping, LIN Haiqing, XU Xiaolong, XU Meiyong (80)
- Study on carbon and nitrogen stable isotopes of size fractionated zooplankton in western South China Sea
 ZHANG Wenbo, HUANG Honghui, GONG Xiuyu, LIU Huaxue (89)
- Analysis of eutrophication changes and its contributors' sources in Sandu bay from 2010 to 2021
 LIN Jianguo (97)

Techniques and Methods

- Small sample generation adversarial network semantic segmentation based on optical remote sensing oil spill images
 LIU Chuan, MA Yujuan, FAN Jianchao (107)
- Research on high-precision intelligent extraction methods for marine algae aquaculture areas in Fujian Province
 CHEN Hongmei, WU Ting, LIN Wanqiang, CHEN Yunzhi, LUO Donglian (116)
- Based on the relative dispersion approach to detect the material structure in the ocean—a case on Haizhou bay
 LIU Yaomin, XIANG Xusheng, ZHANG Xueqing, YU Jinzhen, XIONG Ying (126)
- An algorithm of sea surface wind direction inversion based on Gray level co-occurrence matrix from marine radar images
 WANG Hui, YU Datao, LI Shiyu, QIU Haiyang, ZHU Zhiyu, ZHI Pengfei (135)
- Research on waterline extraction from beach images based on improved SOLOv2 algorithm
 PANG Kun, ZHU Jun, WANG Nan, KONG Tengfei, QI Hongshuai, LEI Gang, YIN Hang, LIU Gen (145)

Review

- Characteristics of oil-clay aggregates and their application in pollution control of spilled oil
 XIA Wenxiang, WANG Kaimei, WU Shuxiao, DONG Yiqi, HOU Jiaying, WANG Mingli (152)