



Research on marine pollution detection system based on wireless sensor network

Zhiwen Yang*, Pingzhen Zhou

Jiangxi Institute of Fashion Technology, Jiang Xi NanChang 330201, China, email: ZhiwenYang53@163.com (Z. Yang)

Received 15 August 2020; Accepted 23 November 2020

ABSTRACT

Based on wireless sensor network, a marine pollution monitoring system is proposed. Based on wireless sensor network technology, data acquisition system is constructed; multi-level and multi-mode data network transmission models are established by using wireless sensor network, wireless microwave communication network, wireless mobile communication network and Internet, and the monitoring system is constructed to realize seamless connection between multiple networks; Combining the traditional fuzzy C-means (FCM) clustering method and genetic algorithm, this paper proposes a method based on spatial vector genetic clustering analysis to process massive monitoring data, and achieve good results.

Keywords: Wireless sensor network; Spatial vector genetic clustering analysis; Marine pollution detection system

* Corresponding author.