

## Improvement of water pollution detection method based on convolution neural network

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### ABSTRACT

In water resources pollution detection, because the collected data is not filtered, the rate of missed detection is high, and the accuracy of detection results is limited. Therefore, a method of water resources pollution detection based on convolution neural network is proposed. The data of water resource pollution is input into convolutional neural network to calculate its average fitness value, generate the optimal rule set, calculate its average fitness, train the water resource pollution detection data, and realize the accurate monitoring of water resource pollution. The experimental results show that the method has high detection accuracy, low leakage rate and high detection efficiency.

**Keywords:** Convolution neural network; Water resource; Microwave wireless transmission; Pollution detection

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