论文

一种基于云模型的辐射源识别方法

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摘要
该文针对测量参数的不确定所造成的辐射源不能正确识别问题，提出了一种基于云模型的识别方法。该方法首先利用云模型对雷达模板库中区间类型的参数变量进行正态云建模从而得到测量参数的隶属度，然后利用云模型的定性定量转换特性来描述离散型参数变量的调制匹配程度，同时给出了一种确定辐射源识别权值的新方法，能够动态调整各特征参数的权值。仿真结果表明，这种基于云模型的识别方法是适用有效的。
关键词　雷达　辐射源识别　云模型　正态云　隶属度
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A Method for Emitter Recognition Based on Cloud Model

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Abstract
To deal with the parameter uncertainty in emitter recognition problem, this paper presents a viable recognition method based on cloud model. First, for getting the degree of membership of the measurement parameter, it applies this theory to model the interval type parameters in template database with normal cloud model. Then it uses the characteristic of the transformation between qualitative concepts and their quantitative expression to describe the matching degree of the discrete parameters. At the same time, a new method of determining weight coefficients is proposed, by which the coefficient can be adjusted dynamically. Simulation results show that the method is applicable and effective.
Key words　Radar　Emitter recognition　Cloud model　Normal cloud　Degree of membership

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