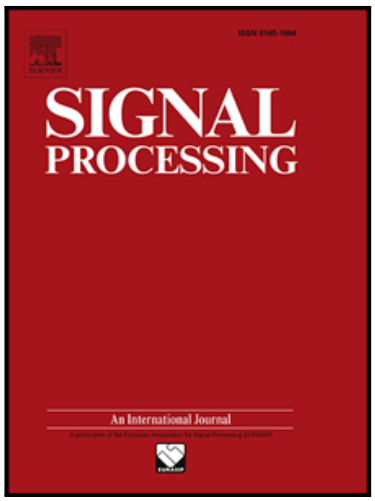

3D AOA Target Tracking Using Distributed Sensors with Multi-hop Information Sharing

Sheng Xu, Kutluyıl Doğançay, Hatem Hmam

PII: S0165-1684(17)30373-0
DOI: 10.1016/j.sigpro.2017.10.014
Reference: SIGPRO 6635

To appear in: *Signal Processing*

Received date: 9 February 2017
Revised date: 10 October 2017
Accepted date: 11 October 2017

Please cite this article as: Sheng Xu, Kutluyıl Doğançay, Hatem Hmam, 3D AOA Target Tracking Using Distributed Sensors with Multi-hop Information Sharing, *Signal Processing* (2017), doi: 10.1016/j.sigpro.2017.10.014

Highlights

- A 3D AOA tracking algorithm is proposed based on multi-hop information sharing to realize out-of-sequence data transmission.
- To account for time delay of received information and to learn the network topology, a neighborhood matrix method is developed.
- The proposed algorithm incorporates the estimates of out-of-sequence data employing packet-delay classification and performs close to the centralized method.