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SPECIAL ISSUE

SPECIAL ISSUE ON FOUNDATIONS AND TRENDS IN LOCALIZATION TECHNOLOGIES—PART I

Edited by M. Z. Win, R. M. Buehrer, G. Chrisikos, A. Conti, and H. V. Poor

1022 Sensor Radar for Object Tracking
By M. Chiani, A. Giorgetti, and E. Paolini
|INVITED PAPER| This paper discusses precise localization and tracking of objects not equipped with dedicated tags, by means of a network of wideband radio sensors.

1042 Acoustic Local Positioning With Encoded Emission Beacons
By J. Ureña, Á. Hernández, J. J. García, J. M. Villadangos, M. C. Pérez, D. Gualda, F. J. Álvarez, and T. Aguilera
|INVITED PAPER| This paper describes the acoustic local positioning systems employing encoded emission beacons and presents the results based on a testbed of mobile robot navigation.

1063 Localization via Visible Light Systems
By M. F. Keskin, A. D. Sezer, and S. Gezici
|INVITED PAPER| This paper considers the problem of localization in visible light systems and discusses localization techniques, cooperative architectures, iterative algorithms, and optimal power allocation.

1089 Collaborative Sensor Network Localization: Algorithms and Practical Issues
By R. M. Buehrer, H. Wymeersch, and R. M. Vaghefi
|INVITED PAPER| This paper surveys collaborative localization with an emphasis on algorithms and practical issues in applications for 5G and IoT networks.

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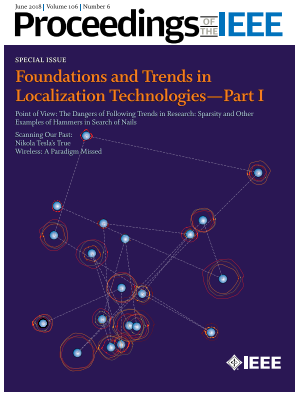

On the Cover: The month's cover image is an artist's rendition of network localization and navigation, displaying nodes in a network with associated location information, which beautifully captures the essence of this special issue.