

CONTENTS

FEBRUARY 2018 / VOL. 106 / NO. 2

REGULAR PAPERS ISSUE

Message Passing Algorithms for Scalable Multitarget Tracking 221

By F. Meyer, T. Kropfreiter, J. L. Williams, R. A. Lau, F. Hlawatsch, P. Braca, and M. Z. Win

 $|\hbox{CONTRIBUTED PAPER}| \ \ \hbox{Superior scalability and performance of message passing algorithms}$ enable new real-time applications of multitarget tracking with resource-limited devices.

Neuro-Inspired Computing With Emerging Nonvolatile Memory 260

Bv S. Yu

CONTRIBUTED PAPER This article offers a timely review of the state of the art, challenges, and prospects of neuro-inspired computing with such emerging nonvolatile memory

Signal Processing and Coding Techniques for 2-D Magnetic 286 **Recording: An Overview**

By S. S. Garani, L. Dolecek, J. Barry, F. Sala, and B. Vasić CONTRIBUTED PAPER This article provides a wide overview of 2-D magnetic recording technology, channel models and capacity, signal processing algorithms, and errorcorrecting codes attuned to 2-D channels.

DEPARTMENTS

214 POINT OF VIEW

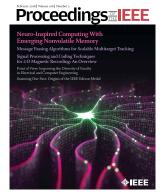
Improving the Diversity of Faculty in Electrical and Computer Engineering (iREDEFINE ECE) By A. Petropulu and S. Lord

219 SCANNING THE ISSUE

319 SCANNING OUR PAST

Origins of the IEEE Edison Medal By D. P. Bart and J. B. Bart

329 FUTURE SPECIAL ISSUE/SPECIAL **SECTIONS**



On the Cover: Our cover image this month highlights neuroinspired computing with an artist's depiction of a neuron as a part of a neural network.