

1. Record Nr.	UNINA9910299718903321
Autore	Iyengar Sitharama S
Titolo	Mathematical Theories of Distributed Sensor Networks // by Sitharama S. Iyengar, Kianoosh G. Boroojeni, N. Balakrishnan
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4419-8420-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (163 p.)
Disciplina	004 004.6 620 621.382
Soggetti	Electrical engineering Signal processing Image processing Speech processing systems Computer networks Computer science - Mathematics Communications Engineering, Networks Signal, Image and Speech Processing Computer Communication Networks Computational Science and Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction to Distributed Sensor Networks -- Region-Guarding Problem in 3-D Areas -- Expectation-Maximization For Acoustic Source Localization -- Coordinate-Free Coverage in Sensor Networks via Homology -- Coverage Assessment and Target Tracking in 3-D Domains -- A Stochastic Preserving Scheme of Location-Privacy.
Sommario/riassunto	Mathematical Theory of Distributed Sensor Networks demonstrates how mathematical theories can be used to provide distributed sensor modeling and to solve important problems such as coverage hole detection and repair. The book introduces the mathematical and computational structure by discussing what they are, their applications

and how they differ from traditional systems. The text also explains how mathematics are utilized to provide efficient techniques implementing effective coverage, deployment, transmission, data processing, signal processing, and data protection within distributed sensor networks. Finally, the authors discuss some important challenges facing mathematics to get more incite to the multidisciplinary area of distributed sensor networks.
