

1. Record Nr.	UNISA996464432303316
Titolo	Algorithms for sensor systems : 17th International Symposium on Algorithms and Experiments for Wireless Sensor Networks, ALGOSENSORS 2021, Lisbon, Portugal, September 9-10, 2021, proceedings // Leszek Gasieniec, Ralf Klasing, Tomasz Radzik (editors)
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-89240-9
Descrizione fisica	1 online resource (166 pages)
Collana	Lecture Notes in Computer Science ; ; v.12961
Disciplina	681
Soggetti	Wireless sensor networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	<p>Intro -- Preface -- Organization -- Universally-Optimal Distributed Algorithms, (Congestion+Dilation)-Competitive Oblivious Routing, and Hop-Constrained Network Design (Abstract of Invited Talk) -- Contents -- Distributed Transformations of Hamiltonian Shapes Based on Line Moves -- 1 Introduction -- 1.1 Related Work -- 1.2 Our Contribution -- 2 Model -- 3 The Distributed Hamiltonian Transformation -- References -- Stand up Indulgent Gathering -- 1 Introduction -- 2 Model -- 3 The SUIG Algorithm -- 4 Concluding Remarks -- References -- Gathering a Euclidean Closed Chain of Robots in Linear Time -- 1 Introduction -- 2 Model and Notation -- 3 Basics -- 3.1 Isogonal Configurations -- 3.2 Sequential Movement with Run-States -- 4 Closed-Chain-Hopper -- 4.1 Intuition About the Asymmetric Algorithm -- 4.2 Asymmetric Algorithm in Detail -- 4.3 Symmetric Algorithm -- 4.4 Combination of the Algorithms -- 4.5 Analysis Sketch -- 5 Concluding Remarks -- References -- Centralised Connectivity-Preserving Transformations for Programmable Matter: A Minimal Seed Approach -- 1 Introduction -- 2 Contribution -- 3 Model -- 4 Infeasible Transformations and the Time Lower Bound -- 4.1 Time and Seed Lower Bounds for Line Transformations -- 5 Transformation for Nice Shapes -- 5.1 Line to Nice Shape -- 5.2 RaiseNodes -- 5.3 MirrorSeed -- 5.4 DepositNode -- 5.5 Construction of a Subset of Nice</p>

Shapes -- 5.6 Construction of Any Nice Shape -- 6 Conclusions -- References -- Distributed Coloring and the Local Structure of Unit-Disk Graphs -- 1 Introduction -- 2 Preliminaries -- 2.1 Distributed Models of Communication -- 2.2 Distributed Coloring -- 2.3 Unit-Disk Graphs -- 3 Location-Aware Coloring -- 4 Coloring Without Coordinates -- 5 Conclusion -- References -- Evacuating from p Unit Disks in the Wireless Model -- 1 Introduction -- 1.1 Related Work.
1.2 High Level of New Contributions and Motivation -- 2 Problem Definition, Notation and Nomenclature -- 3 Algorithms for Evacuating 2 Robots in p Spaces -- 3.1 Worst Case Analysis of Algorithm Wireless-Searchp() -- 4 Visualization of Key Concepts and Results -- 5 Lower Bounds and the Proof of Theorem 1 -- 6 Discussion -- References -- Beep-And-Sleep: Message and Energy Efficient Set Cover -- 1 Introduction -- 1.1 Related Work -- 1.2 Structure of This Paper -- 2 An Efficient SetCover-Algorithm for the Beeping-Model -- 2.1 Proof of Theorem 1 -- 2.2 Extension to DominatingSet -- 3 A Low-Message KT_0 Algorithm -- 3.1 Proof of Theorem 2 -- 3.2 Lower Bound -- 4 Conclusion and Future Work -- References -- Byzantine Fault Tolerant Symmetric-Persistent Circle Evacuation -- 1 Introduction -- 1.1 Model and Preliminaries -- 1.2 Related Work -- 1.3 Results of the Paper -- 2 Evacuation with One Byzantine Fault -- 2.1 Lower Bound for Symmetric-Persistent Algorithms -- 3 Evacuation with Two Byzantine Faults -- 3.1 Algorithm for $(n,2)$ - Evacuation -- 4 Conclusion -- A Appendix - (n) Calculation -- References -- Overflow Management with Self-eliminations -- 1 Introduction -- 2 Model Definition -- 3 Algorithms and Competitive Analysis -- 4 Simulation Results -- 5 Conclusion and Open Questions -- References -- Population Protocols with Unreliable Communication -- 1 Introduction -- 1.1 Main Results (Preview) -- 2 Basic Definitions -- 2.1 Protocols -- 2.2 Fair Executions -- 2.3 Functions Implemented by Protocols -- 3 Expressive Power of Population Protocols and Related Models -- 4 Our Models -- 4.1 Proposed Models -- 4.2 The Main Result -- 5 Proof of the Main Result -- 6 Non-monotonic Impact of Unreliability -- 7 Conclusion and Future Directions -- References -- Author Index.
