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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11638
Disciplina	511.6 004.0151
Soggetti	Computer science—Mathematics Discrete mathematics Algorithms Artificial intelligence—Data processing Computer arithmetic and logic units Computer graphics Discrete Mathematics in Computer Science Data Science Arithmetic and Logic Structures Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A note on handicap incomplete tournaments -- Computing the k-Crossing Visibility Region of a Point in a Polygon -- An Improved Scheme in the Two Query Adaptive Bitprobe Model -- On Erds Szekeres-type problems for k-convex point sets -- Algorithms and Hardness results on Liar's Dominating Set and k-tuple Dominating Set -- Fixed-parameter tractability of (n-k) List Coloring -- Finding Periods in Cartesian Tree Matching -- Parameterized Complexity of Min-Power Asymmetric Connectivity -- Solving Group Interval Scheduling Efficiently -- Call Admission on Trees with Advice (Extended Abstract) -- Power Edge Set and Zero Forcing Set remain difficult in cubic graphs

-- Towards a Complexity Dichotomy for Colourful Components  
Problems on k-caterpillars and Small-Degree Planar Graphs -- Maximal  
irredundant set enumeration in bounded-degeneracy and bounded-  
degree hypergraphs -- Dual Domination -- Reaching 3-Connectivity  
via Edge-edge Additions -- Cops and robber on some families of  
oriented graphs -- Disjoint clustering in combinatorial circuits -- The  
hull number in the convexity of induced paths of order 3 --  
Supermagic graphs with many odd degrees -- Incremental algorithm  
for minimum cut and edge connectivity in Hypergraph -- A General  
Algorithmic Scheme for Modular Decompositions of Hypergraphs and  
Applications -- Shortest-Path-Preserving Rounding -- Complexity and  
Algorithms for Semipaired Domination in Graphs -- Computing the  
Rooted Triplet Distance between Phylogenetic Networks --  
Parameterized Algorithms for Graph Burning Problem -- Extension and  
its price for the connected vertex cover problem -- An Improved Fixed-  
Parameter Algorithm for Max-Cut Parameterized by Crossing Number  
-- An Efficient Algorithm for Enumerating Chordal Bipartite Induced  
Subgraphs in Sparse Graphs -- Complexity of fall coloring for restricted  
graph classes -- Succinct Representation of Linear Extensions via MDDs  
and Its Application to Scheduling under Precedence Constraints --  
Maximum clique exhaustive search in circulant k-hypergraphs --  
Burrows-Wheeler transform of words defined by morphisms -- Stable  
Noncrossing Matchings -- On the Average Case of MergeInsertion --  
Shortest Unique Palindromic Substring Queries on Run-Length Encoded  
Strings -- A Partition Approach to Lower Bounds for Zero-Visibility  
Cops and Robber.

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#### Sommario/riassunto

This book constitutes the refereed post-conference proceedings of the 30th International Workshop on Combinatorial Algorithms, IWOCA 2019, held in Pisa, Italy, in July 2019. The 36 regular papers presented in this volume were carefully reviewed and selected from 73 submissions. They cover diverse areas of combinatorial algorithms, complexity theory, graph theory and combinatorics, combinatorial optimization, cryptography and information security, algorithms on strings and graphs, graph drawing and labelling, computational algebra and geometry, computational biology, probabilistic and randomized algorithms, algorithms for big data analytics, and new paradigms of computation.

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