Michael Segal

List of Publications by Year
in descending order

145 papers	1,400 citations	430874 18 h-index	501196 28 g-index
150 all docs	150 docs citations	150 times ranked	901 citing authors

#	Article	IF	Citations
1	A simple improved distributed algorithm for minimum CDS in unit disk graphs. ACM Transactions on Sensor Networks, 2006, 2, 444-453.	3.6	151
2	Improved approximation algorithms for connected sensor cover. Wireless Networks, 2007, 13, 153-164.	3.0	72
3	Enumerating longest increasing subsequences and patience sorting. Information Processing Letters, 2000, 76, 7-11.	0.6	58
4	Improved Competitive Performance Bounds for CIOQ Switches. Algorithmica, 2012, 63, 411-424.	1.3	36
5	Dynamic Coverage in Ad-Hoc Sensor Networks. Mobile Networks and Applications, 2005, 10, 9-17.	3.3	35
6	Packet mode and QoS algorithms for buffered crossbar switches with FIFO queuing. Distributed Computing, 2010, 23, 163-175.	0.8	34
7	Enclosing k points in the smallest axis parallel rectangle. Information Processing Letters, 1998, 65, 95-99.	0.6	27
8	Near-Optimal Multicriteria Spanner Constructions in Wireless Ad Hoc Networks. IEEE/ACM Transactions on Networking, 2010, 18, 1963-1976.	3.8	26
9	Optimization schemes for protective jamming. , 2012, , .		25
10	Providing Performance Guarantees in Multipass Network Processors. IEEE/ACM Transactions on Networking, 2012, 20, 1895-1909.	3.8	25
11	Cluster-Based Beaconing Process for VANET. Vehicular Communications, 2015, 2, 80-94.	4.0	24
12	Vehicle authentication via monolithically certified public key and attributes. Wireless Networks, 2016, 22, 879-896.	3.0	24
13	Improved algorithms for placing undesirable facilities. Computers and Operations Research, 2002, 29, 1859-1872.	4.0	22
14	Approximation Algorithms for the Mobile Piercing Set Problem with Applications to Clustering in Ad-Hoc Networks. Mobile Networks and Applications, 2004, 9, 151-161.	3.3	21
15	Space and speed tradeoffs in TCAM hierarchical packet classification. Journal of Computer and System Sciences, 2013, 79, 111-121.	1.2	21
16	On construction of minimum energy k-fault resistant topologies. Ad Hoc Networks, 2009, 7, 363-373.	5.5	20
17	Providing performance guarantees in multipass network processors. , 2011, , .		20
18	Improved structures for data collection in wireless sensor networks. , 2014, , .		20

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19	Discrete rectilinear 2-center problems. Computational Geometry: Theory and Applications, 2000, 15, 203-214.	0.5	19
20	Covering a set of points by two axis-parallel boxes. Information Processing Letters, 2000, 75, 95-100.	0.6	18
21	Interworking between MANET and satellite systems for emergency applications. International Journal of Satellite Communications and Networking, 2007, 25, 551-558.	1.8	18
22	Collecting data in ad-hoc networks with reduced uncertainty. Ad Hoc Networks, 2014, 17, 71-81.	5.5	17
23	Balancing work and size with bounded buffers. , 2014, , .		17
24	Automated antenna positioning algorithms for wireless fixed-access networks. Journal of Heuristics, 2007, 13, 243-263.	1.4	16
25	Novel algorithms for the network lifetime problem in wireless settings. Wireless Networks, 2011, 17, 397-410.	3.0	16
26	Efficient algorithms for centers and medians in interval and circular-arc graphs. Networks, 2002, 39, 144-152.	2.7	15
27	OBNOXIOUS FACILITY LOCATION: COMPLETE SERVICE WITH MINIMAL HARM. International Journal of Computational Geometry and Applications, 2000, 10, 581-592.	0.5	14
28	Reducing Interferences in VANETs. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 1582-1587.	8.0	14
29	OPTIMAL FACILITY LOCATION UNDER VARIOUS DISTANCE FUNCTIONS. International Journal of Computational Geometry and Applications, 2000, 10, 523-534.	0.5	13
30	Fast algorithm for multicast and data gathering in wireless networks. Information Processing Letters, 2008, 107, 29-33.	0.6	13
31	Direction election in flocking swarms. Ad Hoc Networks, 2014, 12, 250-258.	5.5	13
32	Centdian Computation in Cactus Graphs. Journal of Graph Algorithms and Applications, 2012, 16, 199-224.	0.4	13
33	Computing a $(1+\hat{I}\mu)$-Approximate Geometric Minimum-Diameter Spanning Tree. Algorithmica, 2004, 38, 577-589.	1.3	12
34	On Bounded Leg Shortest Paths Problems. Algorithmica, 2011, 59, 583-600.	1.3	12
35	Optimization Schemes for Protective Jamming. Mobile Networks and Applications, 2014, 19, 45-60.	3.3	12
36	Maintenance of a Piercing Set for Intervals with Applications. Algorithmica, 2003, 36, 59-73.	1.3	11

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37	Competitive Algorithms for Maintaining a Mobile Center. Mobile Networks and Applications, 2006, 11, 177-186.	3.3	11
38	Near Optimal Multicriteria Spanner Constructions in Wireless Ad-Hoc Networks. , 2009, , .		11
39	SPLAST: a novel approach for multicasting in mobile wireless ad hoc networks. , 0, , .		10
40	Deaf, Dumb, and Chatting Asynchronous Robots. Lecture Notes in Computer Science, 2009, , 71-85.	1.3	10
41	Geometric applications of posets. Computational Geometry: Theory and Applications, 1998, 11, 143-156.	0.5	9
42	Energy efficient communication in ad hoc networks from user's and designer's perspective. Mobile Computing and Communications Review, 2005, 9, 15-26.	1.7	9
43	Geographic Quorum System Approximations. Algorithmica, 2005, 41, 233-244.	1.3	9
44	Fault-Tolerant Power Assignment and Backbone in Wireless Networks. , 0, , .		9
45	Bounded-Hop Energy-Efficient Liveness of Flocking Swarms. IEEE Transactions on Mobile Computing, 2013, 12, 516-528.	5.8	9
46	Improved structures for data collection in static and mobile wireless sensor networks. Journal of Heuristics, 2015, 21, 233-256.	1.4	9
47	Optical PUF for Non-Forwardable Vehicle Authentication. Computer Communications, 2016, 93, 52-67.	5.1	9
48	k-fault resistance in wireless ad-hoc networks. , 2005, , .		8
49	Improved bounds for data-gathering time in sensor networks. Computer Communications, 2008, 31, 4026-4034.	5.1	8
50	Maximizing the number of obnoxious facilities to locate within a bounded region. Computers and Operations Research, 2010, 37, 163-171.	4.0	8
51	Using central nodes for efficient data collection in wireless sensor networks. Computer Networks, 2015, 91, 425-437.	5.1	8
52	Confining Wi-Fi Coverage: A Crowdsourced Method Using Physical Layer Information. , 2016, , .		8
53	Secure communication through jammers jointly optimized in geography and time. Pervasive and Mobile Computing, 2017, 41, 83-105.	3.3	8
54	<i>3-D-SIS</i>: A 3-D-Social Identifier Structure for Collaborative Edge Computing Based Social IoT. IEEE Transactions on Computational Social Systems, 2022, 9, 313-323.	4.4	8

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55	Advanced Routing Algorithms for Low Orbit Satellite Constellations. , 2021, , .		8
56	Best Effort and Priority Queuing Policies for Buffered Crossbar Switches. Lecture Notes in Computer Science, 2008, , 170-184.	1.3	8
57	ON PIERCING SETS OF AXIS-PARALLEL RECTANGLES AND RINGS. International Journal of Computational Geometry and Applications, 1999, 09, 219-233.	0.5	7
58	Fast Algorithms for Approximating Distances. Algorithmica, 2002, 33, 263-269.	1.3	7
59	Lower Bounds for Covering Problems. Mathematical Modelling and Algorithms, 2002, 1, 17-29.	0.5	7
60	Improved Algorithms for Data-Gathering Time in Sensor Networks II: Ring, Tree and Grid Topologies. , 2007, , .		7
61	Low-Energy Fault-Tolerant Bounded-Hop Broadcast in Wireless Networks. IEEE/ACM Transactions on Networking, 2009, 17, 582-590.	3.8	7
62	Optimal placement of protective jammers for securing wireless transmissions in a geographic domain. , 2015, , .		7
63	Using data mules for sensor network data recovery. Ad Hoc Networks, 2016, 40, 26-36.	5.5	7
64	Locating battery charging stations to facilitate almost shortest paths. Discrete Applied Mathematics, 2019, 254, 10-16.	0.9	7
65	Breaching the privacy of connected vehicles network. Telecommunication Systems, 2019, 70, 541-555.	2.5	7
66	Rectilinear Static and Dynamic Discrete 2-center Problems. Lecture Notes in Computer Science, 1999, , 276-287.	1.3	7
67	Optimal Facility Location under Various Distance Functions. Lecture Notes in Computer Science, 1999, , 318-329.	1.3	7
68	Improved Competitive Performance Bounds for CIOQ Switches. Lecture Notes in Computer Science, 2008, , 577-588.	1.3	7
69	Improved Lower Bounds for Data-Gathering Time in Sensor Networks. , 2007, , .		6
70	Power efficient resilience and lifetime in wireless ad-hoc networks. , 2008, , .		6
71	Improved Algorithms for Data-Gathering Time in Sensor Networks II: Ring, Tree, and Grid Topologies. International Journal of Distributed Sensor Networks, 2009, 5, 463-479.	2.2	6
72	Improving lifetime of wireless sensor networks. Network Protocols and Algorithms, 2010, 1, .	1.0	6

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73	A Cluster-Based Beaconing Approach in VANETs: Near Optimal Topology Via Proximity Information. Mobile Networks and Applications, 2013, 18, 766-787.	3.3	6
74	Scheduling problems in transportation networks of line topology. Optimization Letters, 2014, 8, 777-799.	1.6	6
75	Dynamic Attribute Based Vehicle Authentication. , 2014, , .		6
76	Connected Ad-Hoc swarm of drones. , 2020, , .		6
77	Space and Speed Tradeoffs in TCAM Hierarchical Packet Classification. , 2008, , .		5
78	Packet mode and QoS algorithms for buffered crossbar switches with FIFO queuing. , 2008, , .		5
79	Improved approximation algorithms for maximum lifetime problems in wireless networks. Theoretical Computer Science, 2012, 453, 88-97.	0.9	5
80	The Euclidean Bottleneck Steiner Path Problem and Other Applications of $(\hat{I}\pm,\hat{I}^2)$-Pair Decomposition. Discrete and Computational Geometry, 2014, 51, 1-23.	0.6	5
81	Large profits or fast gains: A dilemma in maximizing throughput with applications to network processors. Journal of Network and Computer Applications, 2016, 74, 31-43.	9.1	5
82	Dynamic attribute based vehicle authentication. Wireless Networks, 2017, 23, 1045-1062.	3.0	5
83	Placing and Maintaining a Core Node in Wireless Ad Hoc Sensor Networks. Lecture Notes in Computer Science, 2007, , 13-24.	1.3	5
84	Improved Approximation Algorithms for Maximum Lifetime Problems in Wireless Networks. Lecture Notes in Computer Science, 2009, , 41-51.	1.3	5
85	A simple improved distributed algorithm for minimum CDS in unit disk graphs. , 0, , .		4
86	Real-time data gathering in sensor networks. Discrete Applied Mathematics, 2010, 158, 543-550.	0.9	4
87	Improved Multi-criteria Spanners for Ad-Hoc Networks Under Energy and Distance Metrics. , 2010, , .		4
88	A cluster based beaconing process for VANET. , 2013, , .		4
89	Cooperative data collection in ad hoc networks. Wireless Networks, 2013, 19, 145-159.	3.0	4
90	Interference-free energy efficient scheduling in wireless ad hoc networks. Ad Hoc Networks, 2013, 11, 201-212.	5.5	4

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91	The delta-betweenness centrality. , 2013, , .		4
92	Optical PUF for Non Forwardable Vehicle Authentication. , 2015, , .		4
93	Secure Communication through Jammers Jointly Optimized in Geography and Time. , 2015, , .		4
94	Collective multi agent deployment for wireless sensor network maintenance. Engineering Applications of Artificial Intelligence, 2021, 102, 104265.	8.1	4
95	On piercing sets of axis-parallel rectangles and rings. Lecture Notes in Computer Science, 1997, , 430-442.	1.3	4
96	Direction election in flocking swarms. , 2010, , .		4
97	Models and algorithms for bandwidth allocation of CBR video streams in a VoD system. , 0, , .		3
98	Planar Maximum Box Problem. Mathematical Modelling and Algorithms, 2004, 3, 31-38.	0.5	3
99	Selecting distances in arrangements of hyperplanes spanned by points. Journal of Discrete Algorithms, 2004, 2, 333-345.	0.7	3
100	EPCRTT-based smoothing and multiplexing of VBR video traffic. Multimedia Tools and Applications, 2008, 36, 203-219.	3.9	3
101	Low complexity algorithms for optimal consumer push-pull partial covering in the plane. European Journal of Operational Research, 2009, 197, 456-464.	5.7	3
102	Message and time efficient multi-broadcast schemes. Theoretical Computer Science, 2015, 569, 13-23.	0.9	3
103	Seam-Aware Location-Based Random Walk Routing Algorithms for Low Orbit Satellite Constellations. , 2021, , .		3
104	Energy efficient connectivity in ad hoc networks from user's and designer's perspective. , 0, , .		2
105	On Real Time Data-Gathering in Sensor Networks. , 2007, , .		2
106	The (k,l) Coredian Tree for Ad Hoc Networks. , 2008, , .		2
107	The euclidean bottleneck steiner path problem. , 2011, , .		2
108	VANET in eyes of hierarchical topology. , 2012, , .		2

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109	Efficient data retrieval in faulty sensor networks using a mobile mule. , 2017, , .		2
110	Explicit Communication Among Stigmergic Robots. International Journal of Foundations of Computer Science, 2019, 30, 315-332.	1.1	2
111	Sensor Network Topology Design and Analysis for Efficient Data Gathering by a Mobile Mule. Algorithmica, 2020, 82, 2784-2808.	1.3	2
112	Avoiding bottlenecks in networks by short paths. Telecommunication Systems, 2021, 76, 491-503.	2.5	2
113	THAAD: Efficient matching queries under temporal abstraction for anomaly detection. Performance Evaluation, 2021, 149-150, 102219.	1.2	2
114	IPvest: Clustering the IP Traffic of Network Entities Hidden Behind a Single IP Address Using Machine Learning. IEEE Transactions on Network and Service Management, 2021, 18, 3647-3661.	4.9	2
115	Lower and Upper Bounds for Tracking Mobile Users. , 2002, , 47-58.		2
116	Improved Approximation Algorithms for Connected Sensor Cover. Lecture Notes in Computer Science, 2004, , 56-69.	1.3	2
117	Scheduling of Vehicles in Transportation Networks. Lecture Notes in Computer Science, 2012, , 124-136.	1.3	2
118	Maintenance of a Piercing Set for Intervals with Applications. Lecture Notes in Computer Science, 2000, , 552-563.	1.3	2
119	Centdian Computation for Sensor Networks. Lecture Notes in Computer Science, 2010, , 187-198.	1.3	2
120	Constrained square-center problems. Lecture Notes in Computer Science, 1998, , 95-106.	1.3	2
121	LEO satellite beam management algorithms. Computer Networks, 2022, 214, 109160.	5.1	2
122	<title>Multiplexing of individually smoothed video streams over computer networks</title>. , 2001, 4519, 148.		1
123	Computing closest and farthest points for a query segment. Theoretical Computer Science, 2008, 393, 294-300.	0.9	1
124	Placing and maintaining a core node in wireless<i>ad hoc</i> networks. Wireless Communications and Mobile Computing, 2010, 10, 826-842.	1.2	1
125	On minimizing the total power of k-strongly connected wireless networks. Wireless Networks, 2010, 16, 1075-1089.	3.0	1
126	Improved multicriteria spanners for Ad-Hoc networks under energy and distance metrics. ACM Transactions on Sensor Networks, 2013, 9, 1-25.	3.6	1

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127	Vehicle proximty map formation in VANET. , 2013, , .		1
128	Using data mules for sensor network resiliency. , 2015, , .		1
129	Coordination of Mobile Mules via Facility Location Strategies. Lecture Notes in Computer Science, 2017, , 107-119.	1.3	1
130	Geometric Applications of Posets. Lecture Notes in Computer Science, 1997, , 402-415.	1.3	1
131	Location always matters: how to improve performance of dynamic networks?. , 0, , .		1
132	Finding Geometric Medians with Location Privacy. , 2020, , .		1
133	2-Sensor Problem. Sensors, 2004, 4, 181-186.	3.8	0
134	Automated antenna positioning for wireless networks. , 0, , .		0
135	A Welcome from the Technical Program Chairs. , 2008, , .		0
136	Interference-free energy efficient scheduling in wireless ad hoc networks. , 2011, , .		0
137	Energy efficient data gathering in multi-hop hierarchical wireless ad hoc networks. , 2011, , .		0
138	Near-optimal, reliable and self-organizing hierarchical topology in VANET. , 2011, , .		0
139	Journal of Computer and System Science: 50 years of celebration. In memory of Professor Edward Blum. Journal of Computer and System Sciences, 2018, 94, 1.	1.2	0
140	Improved Solution to Data Gathering with Mobile Mule. Algorithmica, 2020, 82, 3125-3164.	1.3	0
141	Fast Maintenance of Rectilinear Centers. Lecture Notes in Computer Science, 2001, , 633-639.	1.3	0
142	Dynamic Algorithms for Approximating Interdistances. Lecture Notes in Computer Science, 2003, , 1169-1180.	1.3	0
143	Message and time efficient multi-broadcast schemes. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 132, 21-37.	0.8	0
144	Finding bounded diameter minimum spanning tree in general graphs. Computers and Operations Research, 2022, , 105822.	4.0	0

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145	Privacy Analysis of Query-Set-Size Control. ACM Transactions on Privacy and Security, 0, , .	3.0	0