Gary L Miller

List of Publications by Year
in descending order

52 papers	2,836 citations	331670 21 h-index	330143 37 g-index
52 all docs	52 docs citations	52 times ranked	1001 citing authors

#	Article	IF	Citations
1	Improved Parallel Algorithms for Spanners and Hopsets. , 2015, , .		36
2	Approaching Optimality for Solving SDD Linear Systems. SIAM Journal on Computing, 2014, 43, 337-354.	1.0	38
3	A New Approach to Output-Sensitive Construction of Voronoi Diagrams and Delaunay Triangulations. Discrete and Computational Geometry, 2014, 52, 476-491.	0.6	2
4	Nearly-Linear Work Parallel SDD Solvers, Low-Diameter Decomposition, and Low-Stretch Subgraphs. Theory of Computing Systems, 2014, 55, 521-554.	1.1	20
5	A fast algorithm for well-spaced points and approximate delaunay graphs. , 2013, , .		5
6	A fast solver for a class of linear systems. Communications of the ACM, 2012, 55, 99-107.	4.5	21
7	Efficient Triangle Counting in Large Graphs via Degree-Based Vertex Partitioning. Internet Mathematics, 2012, 8, 161-185.	0.7	86
8	Combinatorial preconditioners and multilevel solvers for problems in computer vision and image processing. Computer Vision and Image Understanding, 2011, 115, 1638-1646.	4.7	63
9	Beating the spread. , 2011, , .		8
10	A Nearly-m log n Time Solver for SDD Linear Systems. , 2011, , .		93
11	Triangle Sparsifiers. Journal of Graph Algorithms and Applications, 2011, 15, 703-726.	0.4	40
12	Approximate centerpoints with proofs. Computational Geometry: Theory and Applications, 2010, 43, 647-654.	0.5	22
13	Hierarchical Diagonal Blocking and Precision Reduction Applied to Combinatorial Multigrid. , 2010, , .		25
14	Size Complexity of Volume Meshes vs. Surface Meshes. , 2009, , .		5
15	Graph partitioning into isolated, high conductance clusters. , 2008, , .		13
16	SVR: Practical Engineering of a Fast 3D Meshing Algorithm*. , 2008, , 45-62.		3
17	Sparse parallel Delaunay mesh refinement. , 2007, , .		24
18	WHEN AND WHY DELAUNAY REFINEMENT ALGORITHMS WORK. International Journal of Computational Geometry and Applications, 2005, 15, 25-54.	0.5	10

#	Article	IF	Citations
19	A bézier-based approach to unstructured moving meshes. , 2004, , .		19
20	Graph Embeddings and Laplacian Eigenvalues. SIAM Journal on Matrix Analysis and Applications, 2000, 21, 703-723.	1.4	50
21	DATA GENERATION FOR GEOMETRIC ALGORITHMS ON NON-UNIFORM DISTRIBUTIONS. International Journal of Computational Geometry and Applications, 1999, 09, 577-597.	0.5	9
22	Optimal Coarsening of Unstructured Meshes. Journal of Algorithms, 1999, 31, 29-65.	0.9	23
23	On the Radius-Edge Condition in the Control Volume Method. SIAM Journal on Numerical Analysis, 1999, 36, 1690-1708.	2.3	21
24	The Dynamic Parallel Complexity of Computational Circuits. SIAM Journal on Computing, 1999, 28, 1664-1688.	1.0	3
25	On the Quality of Spectral Separators. SIAM Journal on Matrix Analysis and Applications, 1998, 19, 701-719.	1.4	103
26	Geometric Mesh Partitioning: Implementation and Experiments. SIAM Journal of Scientific Computing, 1998, 19, 2091-2110.	2.8	79
27	Geometric Separators for Finite-Element Meshes. SIAM Journal of Scientific Computing, 1998, 19, 364-386.	2.8	80
28	Separators for sphere-packings and nearest neighbor graphs. Journal of the ACM, 1997, 44, 1-29.	2.2	164
29	Moments of Inertia and Graph Separators. Journal of Combinatorial Optimization, 1997, 1, 79-104.	1.3	2
30	APPROXIMATING CENTER POINTS WITH ITERATIVE RADON POINTS. International Journal of Computational Geometry and Applications, 1996, 06, 357-377.	0.5	55
31	A DETERMINISTIC LINEAR TIME ALGORITHM FOR GEOMETRIC SEPARATORS AND ITS APPLICATIONS. Fundamenta Informaticae, 1995, 22, 309-329.	0.4	14
32	Automatic Mesh Partitioning. The IMA Volumes in Mathematics and Its Applications, 1993, , 57-84.	0.5	45
33	A new graph triconnectivity algorithm and its parallelization. Combinatorica, 1992, 12, 53-76.	1.2	40
34	Parallel Tree Contraction Part 2: Further Applications. SIAM Journal on Computing, 1991, 20, 1128-1147.	1.0	85
35	Deterministic parallel list ranking. Algorithmica, 1991, 6, 859-868.	1.3	65
36	A simple randomized parallel algorithm for list-ranking. Information Processing Letters, 1990, 33, 269-273.	0.6	41

#	Article	IF	Citations
37	Planar separators and the Euclidean norm. Lecture Notes in Computer Science, 1990, , 338-347.	1.3	16
38	Efficient Parallel Evaluation of Straight-Line Code and Arithmetic Circuits. SIAM Journal on Computing, 1988, 17, 687-695.	1.0	60
39	Subtree isomorphism is in random NC. , 1988, , 43-52.		5
40	Deterministic parallel list ranking. , 1988, , 81-90.		82
41	Optimal Tree Contraction in the EREW Model. , 1988, , 139-156.		44
42	A parallel algorithm for finding a separator in planar graphs. , 1987, , .		37
43	An additivity theorem for the genus of a graph. Journal of Combinatorial Theory Series B, 1987, 43, 25-47.	1.0	20
44	Finding small simple cycle separators for 2-connected planar graphs. Journal of Computer and System Sciences, 1986, 32, 265-279.	1.2	189
45	Efficient parallel evaluation of straight-line code and arithmetic circuits. Lecture Notes in Computer Science, 1986, , 236-245.	1.3	12
46	Parallel tree contraction and its application. , 1985, , .		260
47	Layouts for the Shuffle-Exchange Graph Based on the Complex Plane Diagram. SIAM Journal on Algebraic and Discrete Methods, 1984, 5, 202-215.	0.8	14
48	Isomorphism of k-contractible graphs. A generalization of bounded valence and bounded genus. Information and Control, 1983, 56, 1-20.	1.1	27
49	Isomorphism of graphs which are pairwise k-separable. Information and Control, 1983, 56, 21-33.	1.1	21
50	An asymptotically optimal layout for the shuffle—exchange graph. Journal of Computer and System Sciences, 1983, 26, 339-361.	1.2	12
51	Graph isomorphism, general remarks. Journal of Computer and System Sciences, 1979, 18, 128-142.	1.2	56
52	Riemann's hypothesis and tests for primality. Journal of Computer and System Sciences, 1976, 13, 300-317.	1.2	569