Bruce Hendrickson

List of Publications by Year in Descending Order

35 papers	2,505 citations	23 h-index	35 g-index
35 ext. papers	2,934 ext. citations	2.3 avg, IF	5.02 L-index

#	Paper	IF	Citations
35	Combinatorial Scientific Computing. *Chapman & Hall/CRC Computational Science*, **2012**, 1-19		
34	Computational science: Emerging opportunities and challenges. *Journal of Physics: Conference Series*, **2009**, 180, 012013	0.3	3
33	Graph Analysis with High-Performance Computing. *Computing in Science and Engineering*, **2008**, 10, 14-19	1.5	14
32	Solving Elliptic Finite Element Systems in Near-Linear Time with Support Preconditioners. *SIAM Journal on Numerical Analysis*, **2008**, 46, 3264-3284	2.4	28
31	Latent semantic analysis and Fiedler retrieval. *Linear Algebra and Its Applications*, **2007**, 421, 345-355	0.9	12
30	CHALLENGES IN PARALLEL GRAPH PROCESSING. *Parallel Processing Letters*, **2007**, 17, 5-20	0.3	239
29	Optimal Embeddings and Eigenvalues in Support Theory. *SIAM Journal on Matrix Analysis and Applications*, **2007**, 29, 596-605	1.5	1
28	Multithreaded Algorithms for Processing Massive Graphs. *Chapman & Hall/CRC Computational Science*, **2007**, 237-262		4
27	7. Combinatorial Parallel and Scientific Computing **2006**, 127-141		1
26	Support-Graph Preconditioners. *SIAM Journal on Matrix Analysis and Applications*, **2006**, 27, 930-951	1.5	50
25	Combinatorial Scientific Computing: The Enabling Power of Discrete Algorithms in Computational Science **2006**, 260-280		7
24	Parallel Sn Sweeps on Unstructured Grids: Algorithms for Prioritization, Grid Partitioning, and Cycle Detection. *Nuclear Science and Engineering*, **2005**, 150, 267-283	1.2	25
23	Finding strongly connected components in distributed graphs. *Journal of Parallel and Distributed Computing*, **2005**, 65, 901-910	4.4	50
22	Maximum-weight-basis preconditioners. *Numerical Linear Algebra With Applications*, **2004**, 11, 695-721	1.6	24
21	A parallel rendezvous algorithm for interpolation between multiple grids. *Journal of Parallel and Distributed Computing*, **2004**, 64, 266-276	4.4	29
20	Support Theory for Preconditioning. *SIAM Journal on Matrix Analysis and Applications*, **2003**, 25, 694-717	1.5	59
19	Parallel strategies for crash and impact simulations. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 184, 375-390	5.7	58

18	Dynamic load balancing in computational mechanics. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 184, 485-500	5.7	120
17	Graph partitioning models for parallel computing. *Parallel Computing*, **2000**, 26, 1519-1534	1	262
16	Load balancing fictions, falsehoods and fallacies. *Applied Mathematical Modelling*, **2000**, 25, 99-108	4.5	43
15	Design of dynamic load-balancing tools for parallel applications **2000**,		39
14	Partitioning Rectangular and Structurally Unsymmetric Sparse Matrices for Parallel Processing. *SIAM Journal of Scientific Computing*, **2000**, 21, 2048-2072	2.6	48
13	Parallel Transient Dynamics Simulations: Algorithms for Contact Detection and Smoothed Particle Hydrodynamics. *Journal of Parallel and Distributed Computing*, **1998**, 50, 104-122	4.4	37
12	Toward an Efficient Parallel Eigensolver for Dense Symmetric Matrices. *SIAM Journal of Scientific Computing*, **1998**, 20, 1132-1154	2.6	12
11	Improving the Run Time and Quality of Nested Dissection Ordering. *SIAM Journal of Scientific Computing*, **1998**, 20, 468-489	2.6	55
10	Graph partitioning and parallel solvers: Has the emperor no clothes?. *Lecture Notes in Computer Science*, **1998**, 218-225	0.9	32
9	Partitioning sparse rectangular matrices for parallel computations of Ax and ATv. *Lecture Notes in Computer Science*, **1998**, 239-247	0.9	3
8	Sparse Matrix Ordering Methods for Interior Point Linear Programming. *INFORMS Journal on Computing*, **1998**, 10, 107-113	2.4	12
7	An Algorithm for Two-Dimensional Rigidity Percolation: The Pebble Game. *Journal of Computational Physics*, **1997**, 137, 346-365	4.1	232
6	Transient dynamics simulations **1996**,		9
5	AN EFFICIENT PARALLEL ALGORITHM FOR MATRIX-VECTOR MULTIPLICATION. *International Journal of High Speed Computing*, **1995**, 07, 73-88		41
4	An Improved Spectral Graph Partitioning Algorithm for Mapping Parallel Computations. *SIAM Journal of Scientific Computing*, **1995**, 16, 452-469	2.6	242
3	The Molecule Problem: Exploiting Structure in Global Optimization. *SIAM Journal on Optimization*, **1995**, 5, 835-857	2	119
2	A multilevel algorithm for partitioning graphs **1995**,		254
1	Conditions for Unique Graph Realizations. *SIAM Journal on Computing*, **1992**, 21, 65-84	1.1	341