John Baugh

List of Publications by Year
in descending order

37 papers	437 citations	840585 11 h-index	752573 20 g-index
38 all docs	38 docs citations	38 times ranked	289 citing authors

#	Article	IF	Citations
1	INTRACTABILITY OF THE DIAL-A-RIDE PROBLEM AND A MULTIOBJECTIVE SOLUTION USING SIMULATED ANNEALING. Engineering Optimization, 1998, 30, 91-123.	1.5	68
2	GENETIC ALGORITHM APPROACHES FOR ADDRESSING UNMODELED OBJECTIVES IN OPTIMIZATION PROBLEMS. Engineering Optimization, 2001, 33, 549-569.	1.5	59
3	A MATHEMATICAL PROGRAMMING APPROACH FOR GENERATING ALTERNATIVES IN DISCRETE STRUCTURAL OPTIMIZATION. Engineering Optimization, 1997, 28, 1-31.	1.5	42
4	Application of Genetic Algorithms for the Design of Ozone Control Strategies. Journal of the Air and Waste Management Association, 2000, 50, 1050-1063.	0.9	35
5	Data Abstraction in Engineering Software Development. Journal of Computing in Civil Engineering, 1992, 6, 282-301.	2.5	29
6	A novel optimization approach for minimum cost design of trusses. Computers and Structures, 2007, 85, 1782-1794.	2.4	21
7	Modeling and verifying active structural control systems. Science of Computer Programming, 1997, 29, 99-122.	1.5	19
8	Numerical study on factors influencing typhoon-induced storm surge distribution in Zhanjiang Harbor. Estuarine, Coastal and Shelf Science, 2018, 215, 39-51.	0.9	18
9	Genetic Algorithm-Based Decision Support for Optimizing Seismic Response of Piping Systems. Journal of Structural Engineering, 2005, 131, 389-398.	1.7	15
10	An exact reanalysis technique for storm surge and tides in a geographic region of interest. Coastal Engineering, 2015, 97, 60-77.	1.7	15
11	Significance of multi-hazard risk in design of buildings under earthquake and wind loads. Engineering Structures, 2021, 243, 112623.	2.6	13
12	Verification of an active control system using temporal process algebra. Engineering With Computers, 1996, 12, 46-61.	3.5	12
13	A structure-based model of semantic integrity constraints for relational data bases. Engineering With Computers, 1987, 2, 31-39.	3.5	9
14	Evaluation of distributed finite element algorithms on a workstation network. Engineering With Computers, 1994, 10, 45-62.	3.5	8
15	Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 374-384.	1.3	8
16	Formal methods and finite element analysis of hurricane storm surge: A case study in software verification. Science of Computer Programming, 2018, 158, 100-121.	1.5	7
17	Asynchronous Genetic Algorithms for Heterogeneous Networks Using Coarse-Grained Dataflow. Lecture Notes in Computer Science, 2003, , 730-741.	1.0	7
18	Real-Time Software Development with Formal Models. Journal of Computing in Civil Engineering, 1995, 9, 73-86.	2.5	5

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19	A general characterization of the Hardy Cross method as sequential and multiprocess algorithms. Structures, 2016, 6, 170-181.	1.7	5
20	Adaptive subdomain modeling: A multi-analysis technique for ocean circulation models. Ocean Modelling, 2017, 115, 86-104.	1.0	5
21	Applications of coarse-grained dataflow in computational mechanics. Engineering With Computers, 1992, 8, 13-30.	3.5	4
22	A client–server approach for distributed finite element analysis. Advances in Engineering Software, 1993, 17, 69-78.	1.8	4
23	Semantic Validation of Product and Process Models. Journal of Computing in Civil Engineering, 1997, 11, 26-36.	2.5	4
24	SMT: An interface for localized storm surge modeling. Advances in Engineering Software, 2016, 92, 27-39.	1.8	3
25	Bounded Verification of Sparse Matrix Computations. , 2019, , .		3
26	Genetic Algorithm Search for Least Cost Design of Looped Pipe Networks Using Age as a Quality Surrogate and Different Levels of Redundancy. , 2001, , 1.		2
27	Closure to â€œOptimal Design of Redundant Water Distribution Networks Using a Cluster of Workstationsâ€•by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan. Journal of Water Resources Planning and Management - ASCE, 2007, 133, 580-581.	1.3	2
28	Verifying Concurrency in an Adaptive Ocean Circulation Model. , 2017, , .		2
29	Is Engineering Software Amenable to Formal Specification?. Workshops in Computing, 1993, , 1-17.	0.4	2
30	State-Based Formal Methods in Scientific Computation. Lecture Notes in Computer Science, 2018, , 392-396.	1.0	2
31	Design and verification of real-time systems. Lecture Notes in Computer Science, 1998, , 30-47.	1.0	1
32	Method for Least Cost Design of Looped Pipe Networks for Different Levels of Redundancy Using Genetic Algorithms. , 2000, , 1.		1
33	Finite State Verification of Intelligent Transportation Systems. Journal of Computing in Civil Engineering, 2000, 14, 38-50.	2.5	1
34	Winston-Salem Mobility Manager: Data Collection, Validation, and Performance Evaluation. Transportation Research Record, 2001, 1760, 114-120.	1.0	1
35	Modeling a Discrete Wet-Dry Algorithm for Hurricane Storm Surge in Alloy. Lecture Notes in Computer Science, 2016, , 256-261.	1.0	1
36	Hybrid Theorem Proving as a Lightweight Method for Verifying Numerical Software. , 2018, , .		0

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37	A Simple Hybrid Event-B Model of an Active Control System for Earthquake Protection. Emergence, Complexity and Computation, 2020, , 157-194.	0.2	0