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	Significance of multi-hazard risk in design of buildings under earthquake and wind loads. Engineering Structures, 2021, 243, 112623.	2.6	13
2	A Simple Hybrid Event-B Model of an Active Control System for Earthquake Protection. Emergence, Complexity and Computation, 2020, , 157-194.	0.2	0
3	Bounded Verification of Sparse Matrix Computations. , 2019, , .		3
4	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
5	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
6	Hybrid Theorem Proving as a Lightweight Method for Verifying Numerical Software. , 2018, , .		0
7	State-Based Formal Methods in Scientific Computation. Lecture Notes in Computer Science, 2018, , 392-396.	1.0	2
8	Adaptive subdomain modeling: A multi-analysis technique for ocean circulation models. Ocean Modelling, 2017, 115, 86-104.	1.0	5
9	Verifying Concurrency in an Adaptive Ocean Circulation Model. , 2017, , .		2
10	A general characterization of the Hardy Cross method as sequential and multiprocess algorithms. Structures, 2016, 6, 170-181.	1.7	5
11	SMT: An interface for localized storm surge modeling. Advances in Engineering Software, 2016, 92, 27-39.	1.8	3
12	Modeling a Discrete Wet-Dry Algorithm for Hurricane Storm Surge in Alloy. Lecture Notes in Computer Science, 2016, , 256-261.	1.0	1
13	An exact reanalysis technique for storm surge and tides in a geographic region of interest. Coastal Engineering, 2015, 97, 60-77.	1.7	15
14	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
15	A novel optimization approach for minimum cost design of trusses. Computers and Structures, 2007, 85, 1782-1794.	2.4	21
16	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
17	Genetic Algorithm-Based Decision Support for Optimizing Seismic Response of Piping Systems. Journal of Structural Engineering, 2005, 131, 389-398.	1.7	15
18	Asynchronous Genetic Algorithms for Heterogeneous Networks Using Coarse-Grained Dataflow. Lecture Notes in Computer Science, 2003, , 730-741.	1.0	7

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19	Winston-Salem Mobility Manager: Data Collection, Validation, and Performance Evaluation. Transportation Research Record, 2001, 1760, 114-120.	1.0	1
20	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
21	GENETIC ALGORITHM APPROACHES FOR ADDRESSING UNMODELED OBJECTIVES IN OPTIMIZATION PROBLEMS. Engineering Optimization, 2001, 33, 549-569.	1.5	59
22	Method for Least Cost Design of Looped Pipe Networks for Different Levels of Redundancy Using Genetic Algorithms. , 2000, , 1.		1
23	Finite State Verification of Intelligent Transportation Systems. Journal of Computing in Civil Engineering, 2000, 14, 38-50.	2.5	1
24	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
25	INTRACTABILITY OF THE DIAL-A-RIDE PROBLEM AND A MULTIOBJECTIVE SOLUTION USING SIMULATED ANNEALING. Engineering Optimization, 1998, 30, 91-123.	1.5	68
26	Design and verification of real-time systems. Lecture Notes in Computer Science, 1998, , 30-47.	1.0	1
27	Semantic Validation of Product and Process Models. Journal of Computing in Civil Engineering, 1997, 11, 26-36.	2.5	4
28	A MATHEMATICAL PROGRAMMING APPROACH FOR GENERATING ALTERNATIVES IN DISCRETE STRUCTURAL OPTIMIZATION. Engineering Optimization, 1997, 28, 1-31.	1.5	42
29	Modeling and verifying active structural control systems. Science of Computer Programming, 1997, 29, 99-122.	1.5	19
30	Verification of an active control system using temporal process algebra. Engineering With Computers, 1996, 12, 46-61.	3.5	12
31	Real-Time Software Development with Formal Models. Journal of Computing in Civil Engineering, 1995, 9, 73-86.	2.5	5
32	Evaluation of distributed finite element algorithms on a workstation network. Engineering With Computers, 1994, 10, 45-62.	3.5	8
33	A client–server approach for distributed finite element analysis. Advances in Engineering Software, 1993, 17, 69-78.	1.8	4
34	Is Engineering Software Amenable to Formal Specification?. Workshops in Computing, 1993, , 1-17.	0.4	2
35	Data Abstraction in Engineering Software Development. Journal of Computing in Civil Engineering, 1992, 6, 282-301.	2.5	29
36	Applications of coarse-grained dataflow in computational mechanics. Engineering With Computers, 1992, 8, 13-30.	3.5	4

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37	A structure-based model of semantic integrity constraints for relational data bases. Engineering With Computers, 1987, 2, 31-39.	3.5	9