Peter N Brown

List of Publications by Year in descending order

23 papers	5,790 citations	471509 17 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	4758 citing authors

#	Article	IF	Citations
1	On Using Approximate Finite Differences in Matrix-Free Newton–Krylov Methods. SIAM Journal on Numerical Analysis, 2008, 46, 1892-1911.	2.3	12
2	Fully implicit solution of large-scale non-equilibrium radiation diffusion with high order time integration. Journal of Computational Physics, 2005, 204, 760-783.	3.8	41
3	SUNDIALS. ACM Transactions on Mathematical Software, 2005, 31, 363-396.	2.9	2,134
4	Preconditioning Strategies for Fully Implicit Radiation Diffusion with Material-Energy Transfer. SIAM Journal of Scientific Computing, 2001, 23, 499-516.	2.8	36
5	Spherical harmonic solutions of the Boltzmann transport equation via discrete ordinates. Progress in Nuclear Energy, 2001, 39, 263-284.	2.9	9
6	Semicoarsening Multigrid on Distributed Memory Machines. SIAM Journal of Scientific Computing, 2000, 21, 1823-1834.	2.8	96
7	Iterative Linear Solvers in a 2D Radiation–Hydrodynamics Code: Methods and Performance. Journal of Computational Physics, 1999, 154, 1-40.	3.8	34
8	Consistent Initial Condition Calculation for Differential-Algebraic Systems. SIAM Journal of Scientific Computing, 1998, 19, 1495-1512.	2.8	98
9	GMRES On (Nearly) Singular Systems. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 37-51.	1.4	143
10	A Linear Algebraic Development of Diffusion Synthetic Acceleration for Three-Dimensional Transport Equations. SIAM Journal on Numerical Analysis, 1995, 32, 179-214.	2.3	31
11	Convergence Theory of Nonlinear Newton–Krylov Algorithms. SIAM Journal on Optimization, 1994, 4, 297-330.	2.0	175
12	Using Krylov Methods in the Solution of Large-Scale Differential-Algebraic Systems. SIAM Journal of Scientific Computing, 1994, 15, 1467-1488.	2.8	349
13	A Theoretical Comparison of the Arnoldi and GMRES Algorithms. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 58-78.	1.5	115
14	Projection Methods for Solving Nonlinear Systems of Equations. , 1991, , 341-355.		0
15	Hybrid Krylov Methods for Nonlinear Systems of Equations. SIAM Journal on Scientific and Statistical Computing, 1990, 11, 450-481.	1.5	579
16	Reduced storage matrix methods in stiff ODE systems. Applied Mathematics and Computation, 1989, 31, 40-91.	2.2	170
17	VODE: A Variable-Coefficient ODE Solver. SIAM Journal on Scientific and Statistical Computing, 1989, 10, 1038-1051.	1.5	1,364
18	A Local Convergence Theory for Combined Inexact-Newton/Finite-Difference Projection Methods. SIAM Journal on Numerical Analysis, 1987, 24, 407-434.	2.3	131

#	Article	IF	Citations
19	Matrix-Free Methods for Stiff Systems of ODE's. SIAM Journal on Numerical Analysis, 1986, 23, 610-638.	2.3	152
20	Decay to Uniform States in Food Webs. SIAM Journal on Applied Mathematics, 1986, 46, 376-392.	1.8	10
21	Decay to Uniform States in Predator-Prey Chains. SIAM Journal on Applied Mathematics, 1985, 45, 465-478.	1.8	3
22	Decay to Uniform States in Competitive Systems. SIAM Journal on Mathematical Analysis, 1983, 14, 659-673.	1.9	6
23	Decay to Uniform States in Ecological Interactions. SIAM Journal on Applied Mathematics, 1980, 38, 22-37.	1.8	102