

# Peter N Brown

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11897780/publications.pdf>

Version: 2024-02-01

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  | SUNDIALS. ACM Transactions on Mathematical Software, 2005, 31, 363-396.  | 2.9 | 2,134     |
| 2  | VODE: A Variable-Coefficient ODE Solver. SIAM Journal on Scientific and Statistical Computing, 1989, 10, 1038-1051.  | 1.5 | 1,364     |
| 3  | Hybrid Krylov Methods for Nonlinear Systems of Equations. SIAM Journal on Scientific and Statistical Computing, 1990, 11, 450-481.                                   | 1.5 | 579       |
| 4  | Using Krylov Methods in the Solution of Large-Scale Differential-Algebraic Systems. SIAM Journal of Scientific Computing, 1994, 15, 1467-1488.                       | 2.8 | 349       |
| 5  | Convergence Theory of Nonlinear Newton-Krylov Algorithms. SIAM Journal on Optimization, 1994, 4, 297-330.  | 2.0 | 175       |
| 6  | Reduced storage matrix methods in stiff ODE systems. Applied Mathematics and Computation, 1989, 31, 40-91.   | 2.2 | 170       |
| 7  | Matrix-Free Methods for Stiff Systems of ODEs. SIAM Journal on Numerical Analysis, 1986, 23, 610-638.  | 2.3 | 152       |
| 8  | GMRES On (Nearly) Singular Systems. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 37-51.   | 1.4 | 143       |
| 9  | A Local Convergence Theory for Combined Inexact-Newton/Finite-Difference Projection Methods. SIAM Journal on Numerical Analysis, 1987, 24, 407-434.                  | 2.3 | 131       |
| 10 | A Theoretical Comparison of the Arnoldi and GMRES Algorithms. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 58-78.                                 | 1.5 | 115       |
| 11 | Decay to Uniform States in Ecological Interactions. SIAM Journal on Applied Mathematics, 1980, 38, 22-37.  | 1.8 | 102       |
| 12 | Consistent Initial Condition Calculation for Differential-Algebraic Systems. SIAM Journal of Scientific Computing, 1998, 19, 1495-1512.                              | 2.8 | 98        |
| 13 | Semicoarsening Multigrid on Distributed Memory Machines. SIAM Journal of Scientific Computing, 2000, 21, 1823-1834.  | 2.8 | 96        |
| 14 | 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        |
| 15 | Preconditioning Strategies for Fully Implicit Radiation Diffusion with Material-Energy Transfer. SIAM Journal of Scientific Computing, 2001, 23, 499-516.            | 2.8 | 36        |
| 16 | Iterative Linear Solvers in a 2D Radiation-Hydrodynamics Code: Methods and Performance. Journal of Computational Physics, 1999, 154, 1-40.                           | 3.8 | 34        |
| 17 | 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        |
| 18 | On Using Approximate Finite Differences in Matrix-Free Newton-Krylov Methods. SIAM Journal on Numerical Analysis, 2008, 46, 1892-1911.                               | 2.3 | 12        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Decay to Uniform States in Food Webs. SIAM Journal on Applied Mathematics, 1986, 46, 376-392.   | 1.8 | 10        |
| 20 | Spherical harmonic solutions of the Boltzmann transport equation via discrete ordinates. Progress in Nuclear Energy, 2001, 39, 263-284. | 2.9 | 9         |
| 21 | Decay to Uniform States in Competitive Systems. SIAM Journal on Mathematical Analysis, 1983, 14, 659-673.                               | 1.9 | 6         |
| 22 | Decay to Uniform States in Predator-Prey Chains. SIAM Journal on Applied Mathematics, 1985, 45, 465-478.                                | 1.8 | 3         |
| 23 | Projection Methods for Solving Nonlinear Systems of Equations. , 1991, , 341-355.   |     | 0         |