

# Daniel R Reynolds

## List of Publications by Year in descending order

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Version: 2024-02-01

30  
papers

1,355  
citations

623734

14  
h-index

552781

26  
g-index

31  
all docs

31  
docs citations

31  
times ranked

1573  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enabling New Flexibility in the SUNDIALS Suite of Nonlinear and Differential/Algebraic Equation Solvers. <i>ACM Transactions on Mathematical Software</i> , 2022, 48, 1-24.	2.9	28
2	Cyclically parallelized treecode for fast computations of electrostatic interactions on molecular surfaces. <i>Computer Physics Communications</i> , 2021, 260, 107742.	7.5	3
3	Implicit-Explicit Multirate Infinitesimal GARK Methods. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, A3082-A3113.	2.8	6
4	Enabling GPU accelerated computing in the SUNDIALS time integration library. <i>Parallel Computing</i> , 2021, 108, 102836.	2.1	11
5	A New Class of High-Order Methods for Multirate Differential Equations. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A1245-A1268.	2.8	8
6	Evaluation of Implicit-Explicit Additive Runge-Kutta Integrators for the HOMME-NH Dynamical Core. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4228-4244.	3.8	11
7	Further development of efficient and accurate time integration schemes for meteorological models. <i>Journal of Computational Physics</i> , 2019, 376, 817-837.	3.8	19
8	ENZO: An Adaptive Mesh Refinement Code for Astrophysics (Version 2.6). <i>Journal of Open Source Software</i> , 2019, 4, 1636.	4.6	44
9	Implicit-explicit (IMEX) Runge-Kutta methods for non-hydrostatic atmospheric models. <i>Geoscientific Model Development</i> , 2018, 11, 1497-1515.	3.6	33
10	Impact and importance of hyperdiffusion on the spectral element method: A linear dispersion analysis. <i>Journal of Computational Physics</i> , 2018, 375, 427-446.	3.8	16
11	Filters for Improvement of Multiscale Data from Atomistic Simulations. <i>Multiscale Modeling and Simulation</i> , 2017, 15, 1-28.	1.6	0
12	FULLY COUPLED SIMULATION OF COSMIC REIONIZATION. I. NUMERICAL METHODS AND TESTS. <i>Astrophysical Journal, Supplement Series</i> , 2015, 216, 16.	7.7	30
13	ENZO: AN ADAPTIVE MESH REFINEMENT CODE FOR ASTROPHYSICS. <i>Astrophysical Journal, Supplement Series</i> , 2014, 211, 19.	7.7	615
14	FULLY COUPLED SIMULATION OF COSMIC REIONIZATION. II. RECOMBINATIONS, CLUMPING FACTORS, AND THE PHOTON BUDGET FOR REIONIZATION. <i>Astrophysical Journal</i> , 2014, 789, 149.	4.5	48
15	Multiphysics simulations. <i>International Journal of High Performance Computing Applications</i> , 2013, 27, 4-83.	3.7	244
16	A fully implicit Newton-Krylov-Schwarz method for tokamak magnetohydrodynamics: Jacobian construction and preconditioner formulation. <i>Computational Science &amp; Discovery</i> , 2012, 5, 014003.	1.5	8
17	Sparse Jacobian Construction for Mapped Grid Visco-Resistive Magnetohydrodynamics. <i>Lecture Notes in Computational Science and Engineering</i> , 2012, , 11-21.	0.3	2
18	Modeling early galaxies using radiation hydrodynamics. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
19	Operator-Based Preconditioning of Stiff Hyperbolic Systems. SIAM Journal of Scientific Computing, 2010, 32, 150-170.	2.8	18
20	Cosmological Radiation Hydrodynamics with Enzo. , 2009, , .		1
21	Cosmological radiative transfer comparison project " II. The radiation-hydrodynamic tests. Monthly Notices of the Royal Astronomical Society, 2009, 400, 1283-1316.	4.4	94
22	Self-consistent solution of cosmological radiation-hydrodynamics and chemical ionization. Journal of Computational Physics, 2009, 228, 6833-6854.	3.8	19
23	Implicit solvers for large-scale nonlinear problems. Journal of Physics: Conference Series, 2006, 46, 433-442.	0.4	28
24	On the modeling and computations of nonlinear thermodynamics in SMA wires. Computer Methods in Applied Mechanics and Engineering, 2006, 196, 180-191.	6.6	3
25	A fully implicit numerical method for single-fluid resistive magnetohydrodynamics. Journal of Computational Physics, 2006, 219, 144-162.	3.8	46
26	On the asymptotically stochastic computational modeling of microstructures. Future Generation Computer Systems, 2004, 20, 409-424.	7.5	1
27	Computational modeling of vibration damping in SMA wires. Continuum Mechanics and Thermodynamics, 2004, 16, 495-514.	2.2	6
28	On thermodynamic active control of shape memory alloy wires. Systems and Control Letters, 2003, 48, 211-219.	2.3	3
29	Thermal stabilization of shape memory alloy wires. , 2003, 5049, 24.		1
30	Efficient and automatic implementation of the adjoint state method. ACM Transactions on Mathematical Software, 2002, 28, 22-44.	2.9	7