Steven P Hamilton

List of Publications by Year
in descending order

25 papers	393 citations	840776 11 h-index	752698 20 g-index
27 all docs	27 docs citations	27 times ranked	416 citing authors

#	Article	IF	Citations
1	Implementation, capabilities, and benchmarking of Shift, a massively parallel Monte Carlo radiation transport code. Journal of Computational Physics, 2016, 308, 239-272.	3.8	79
2	Exascale applications: skin in the game. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190056.	3.4	53
3	An assessment of coupling algorithms for nuclear reactor core physics simulations. Journal of Computational Physics, 2016, 311, 241-257.	3.8	35
4	Continuous-energy Monte Carlo neutron transport on GPUs in the Shift code. Annals of Nuclear Energy, 2019, 128, 236-247.	1.8	33
5	Local Improvement Results for Anderson Acceleration with Inaccurate Function Evaluations. SIAM Journal of Scientific Computing, 2017, 39, S47-S65.	2.8	25
6	New multigrid smoothers for the Oseen problem. Numerical Linear Algebra With Applications, 2010, 17, 557-576.	1.6	24
7	Efficient solution of the simplified <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>P</mml:mi></mml:mrow><mml:mrow><mml:mi>N</mml:mi></mml:mrow></mml:msub></mml:math> equations. Journal of Computational Physics, 2015, 284, 155-170.	3.8	23
8	Analysis of Monte Carlo accelerated iterative methods for sparse linear systems. Numerical Linear Algebra With Applications, 2017, 24, e2088.	1.6	20
9	Multigroup Monte Carlo on GPUs: Comparison of history- and event-based algorithms. Annals of Nuclear Energy, 2018, 113, 506-518.	1.8	19
10	Massively Parallel, Three-Dimensional Transport Solutions for the k-Eigenvalue Problem. Nuclear Science and Engineering, 2014, 177, 111-125.	1.1	15
11	A parallel multi-domain solution methodology applied to nonlinear thermal transport problems in nuclear fuel pins. Journal of Computational Physics, 2015, 286, 143-171.	3.8	15
12	Eigenvalue Solvers for Modeling Nuclear Reactors on Leadership Class Machines. Nuclear Science and Engineering, 2018, 190, 31-44.	1.1	8
13	A Monte Carlo synthetic-acceleration method for solving the thermal radiation diffusion equation. Journal of Computational Physics, 2014, 258, 338-358.	3.8	6
14	Hot zero power reactor calculations using the Insilico code. Journal of Computational Physics, 2016, 314, 700-711.	3.8	6
15	Improving variance estimation in Monte Carlo eigenvalue simulations. Annals of Nuclear Energy, 2017, 110, 692-708.	1.8	6
16	Optimization of processor allocation for domain decomposed Monte Carlo calculations. Parallel Computing, 2019, 87, 77-86.	2.1	6
17	A Code-Agnostic Driver Application for Coupled Neutronics and Thermal-Hydraulic Simulations. Nuclear Science and Engineering, 2021, 195, 391-411.	1.1	5
18	Validation Study of Pin Heat Transfer for UO2 Fuel Based on the IFA-432 Experiments. Nuclear Science and Engineering, 2014, 177, 275-290.	1.1	4

#	Article	IF	Citations
19	Mesh independence of the generalized Davidson algorithm. Journal of Computational Physics, 2020, 409, 109322.	3.8	3
20	A Validation Study of Pin Heat Transfer for MOX Fuel Based on the IFA-597 Experiments. Nuclear Science and Engineering, 2014, 178, 172-185.	1.1	2
21	Domain decomposition in the GPU-accelerated Shift Monte Carlo code. Annals of Nuclear Energy, 2022, 166, 108687.	1.8	2
22	Deterministically estimated fission source distributions for Monte Carlo k-eigenvalue problems. Annals of Nuclear Energy, 2018, 119, 7-22.	1.8	1
23	Enhancing Monte Carlo proxy applications on GPUs. , 2019, , .		1
24	Singular value decomposition of adjoint flux distributions for Monte Carlo variance reduction. Annals of Nuclear Energy, 2020, 141, 107327.	1.8	0
25	DESIGN OF A CODE-AGNOSTIC DRIVER APPLICATION FOR HIGH-FIDELITY COUPLED NEUTRONICS AND THERMAL-HYDRAULIC SIMULATIONS. EPJ Web of Conferences, 2021, 247, 06053.	0.3	0