Jeffrey Hittinger

List of Publications by Year
in descending order

26	730	759233	642732
papers	citations	12	23
		h-index	g-index

27	27	27	642
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Consistent coupling algorithms for coupled core-edge simulations of plasma turbulence. Physics of Plasmas, 2021, 28, 012301.	1.9	1
2	Spatial coupling of gyrokinetic simulations, a generalized scheme based on first-principles. Physics of Plasmas, 2021, 28, .	1.9	12
3	Stability Analysis of Inline ZFP Compression for Floating-Point Data in Iterative Methods. SIAM Journal of Scientific Computing, 2020, 42, A2701-A2730.	2.8	6
4	Error Analysis of ZFP Compression for Floating-Point Data. SIAM Journal of Scientific Computing, 2019, 41, A1867-A1898.	2.8	41
5	Linearized Coulomb Collision Operator for Simulation of Interpenetrating Plasma Streams. IEEE Transactions on Plasma Science, 2019, 47, 2074-2080.	1.3	3
6	Verification of 5D continuum gyrokinetic code COGENT: Studies of kinetic drift wave instability. Contributions To Plasma Physics, 2018, 58, 445-450.	1.1	2
7	Universal coding of the reals. , 2018, , .		21
8	Kinetic Simulation of Collisional Magnetized Plasmas with Semi-implicit Time Integration. Journal of Scientific Computing, 2018, 77, 819-849.	2.3	6
9	High-order discretization of a gyrokinetic Vlasov model in edge plasma geometry. Journal of Computational Physics, 2018, 373, 605-630.	3.8	12
10	High-order finite-volume modeling of drift waves. Journal of Computational Physics, 2018, 373, 446-454.	3.8	2
11	Implicit-Explicit Time Integration for the Vlasov-Fokker-Planck Equations. , 2017, , .		1
12	High-order finite-volume methods for hyperbolic conservation laws on mapped multiblock grids. Journal of Computational Physics, 2015, 288, 181-195.	3.8	20
13	A Study on Balancing Parallelism, Data Locality, and Recomputation in Existing PDE Solvers. , 2014, , .		27
14	Progress with the COGENT Edge Kinetic Code: Implementing the Fokker–Planck Collision Operator. Contributions To Plasma Physics, 2014, 54, 517-523.	1.1	20
15	Block-structured adaptive mesh refinement algorithms for Vlasov simulation. Journal of Computational Physics, 2013, 241, 118-140.	3.8	32
16	Simulation of neoclassical transport with the continuum gyrokinetic code COGENT. Physics of Plasmas, 2013, 20, 012513.	1.9	20
17	Numerical modelling of geodesic acoustic mode relaxation in a tokamak edge. Nuclear Fusion, 2013, 53, 063015.	3.5	14
18	High-order, finite-volume methods in mapped coordinates. Journal of Computational Physics, 2011, 230, 2952-2976.	3.8	76

#	Article	IF	Citations
19	A New Class of Nonlinear Finite-Volume Methods for Vlasov Simulation. IEEE Transactions on Plasma Science, 2010, 38, 2198-2207.	1.3	66
20	Experiments and multiscale simulations ofÂlaser propagation through ignition-scaleÂplasmas. Nature Physics, 2007, 3, 716-719.	16.7	72
21	Simulating time-dependent energy transfer between crossed laser beams in an expanding plasma. Journal of Computational Physics, 2005, 209, 695-729.	3.8	18
22	Saturation of power transfer between two copropagating laser beams by ion-wave scattering in a single-species plasma. Physics of Plasmas, 2005, 12, 112701.	1.9	10
23	Investigation of the Discontinuous Galerkin Method for First-Order PDE Approaches to CFD. , 2005, , .		3
24	Effects of ion trapping on crossed-laser-beam stimulated Brillouin scattering. Physics of Plasmas, 2004, 11, 231-244.	1.9	87
25	The Coupling of Radiation and Hydrodynamics. Astrophysical Journal, 1999, 521, 432-450.	4.5	146
26	A three-dimensional model for the probabilistic intergranular failure of polycrystalline arrays. Modelling and Simulation in Materials Science and Engineering, 1996, 4, 261-279.	2.0	10