Michael Grosskopf

List of Publications by Year
in descending order

28 papers	759 citations	623734 14 h-index	526287 27 g-index
32 all docs	32 docs citations	32 times ranked	823 citing authors

#	Article	IF	Citations
1	Self-organized electromagnetic field structures in laser-produced counter-streaming plasmas. Nature Physics, 2012, 8, 809-812.	16.7	118
2	Observation of a Kelvin-Helmholtz Instability in a High-Energy-Density Plasma on the Omega Laser. Physical Review Letters, 2009, 103, 045005.	7.8	86
3	Studying astrophysical collisionless shocks with counterstreaming plasmas from high power lasers. High Energy Density Physics, 2012, 8, 38-45.	1.5	82
4	Prediction and Computer Model Calibration Using Outputs From Multifidelity Simulators. Technometrics, 2013, 55, 501-512.	1.9	69
5	TWO-DIMENSIONAL BLAST-WAVE-DRIVEN RAYLEIGH-TAYLOR INSTABILITY: EXPERIMENT AND SIMULATION. Astrophysical Journal, 2009, 696, 749-759.	4.5	61
6	Calibrating a large computer experiment simulating radiative shock hydrodynamics. Annals of Applied Statistics, 2015, 9, .	1.1	46
7	Radiative effects in radiative shocks in shock tubes. High Energy Density Physics, 2011, 7, 130-140.	1.5	38
8	Dual, orthogonal, backlit pinhole radiography in OMEGA experiments. Review of Scientific Instruments, 2006, 77, 10E327.	1.3	37
9	Measurement of Radiative Shock Properties by X-Ray Thomson Scattering. Physical Review Letters, 2012, 108, 145001.	7.8	34
10	Astrophysically relevant radiation hydrodynamics experiment at the National Ignition Facility. Astrophysics and Space Science, 2011, 336, 207-211.	1.4	19
11	Predictive modeling of a radiative shock system. Reliability Engineering and System Safety, 2011, 96, 1184-1193.	8.9	16
12	A calibration and data assimilation method using the Bayesian MARS emulator. Annals of Nuclear Energy, 2013, 52, 103-112.	1.8	16
13	Blast-wave driven Kelvin-Helmholtz shear layers in a laser driven high-energy-density plasma. Astrophysics and Space Science, 2011, 336, 139-143.	1.4	15
14	Spline-Based Emulators for Radiative Shock Experiments With Measurement Error. Journal of the American Statistical Association, 2013, 108, 411-428.	3.1	15
15	A physics informed emulator for laser-driven radiating shock simulations. Reliability Engineering and System Safety, 2011, 96, 1194-1207.	8.9	14
16	Informing nuclear physics via machine learning methods with differential and integral experiments. Physical Review C, 2021, 104, .	2.9	14
17	Follow-Up Experimental Designs for Computer Models and Physical Processes. Journal of Statistical Theory and Practice, 2011, 5, 119-136.	0.5	11
18	Increase of the density, temperature and velocity of plasma jets driven by a ring of high energy laser beams. High Energy Density Physics, 2013, 9, 336-340.	1.5	10

#	Article	IF	Citations
19	Coupling 1D xRAGE simulations with machine learning for graded inner shell design optimization in double shell capsules. Physics of Plasmas, 2021, 28, .	1.9	10
20	Exploring Sensitivity of ICF Outputs to Design Parameters in Experiments Using Machine Learning. IEEE Transactions on Plasma Science, 2021, 49, 2238-2246.	1.3	8
21	Calibration of energy density functionals with deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 074001.	3.6	7
22	Modeling of multi-interface, diverging, hydrodynamic experiments for the National Ignition Facility. Astrophysics and Space Science, 2009, 322, 57-63.	1.4	6
23	Emulation of Numerical Models With Over-Specified Basis Functions. Technometrics, 2017, 59, 153-164.	1.9	6
24	Image processing of radiographs in 3D Rayleigh-Taylor decelerating interface experiments. Astrophysics and Space Science, 2009, 322, 49-55.	1.4	5
25	Simulation of laser-driven, ablated plasma flows in collisionless shock experiments on OMEGA and the NIF. High Energy Density Physics, 2013, 9, 192-197.	1.5	5
26	Identifying Entangled Physics Relationships Through Sparse Matrix Decomposition to Inform Plasma Fusion Design. IEEE Transactions on Plasma Science, 2021, 49, 2410-2419.	1.3	5
27	Generalized Computer Model Calibration for Radiation Transport Simulation. Technometrics, 2021, 63, 27-39.	1.9	3
28	Assessment of Novel Techniques for Nuclear Data Evaluation. , 2018, , 105-116.		2