Len Margolin

List of Publications by Year
in descending order

30 papers	1,118 citations	471509 17 h-index	477307 29 g-index
31 all docs	31 docs citations	31 times ranked	658 citing authors

#	Article	IF	Citations
1	A rationale for implicit turbulence modelling. International Journal for Numerical Methods in Fluids, 2002, 39, 821-841.	1.6	178
2	Second-order sign-preserving conservative interpolation (remapping) on general grids. Journal of Computational Physics, 2003, 184, 266-298.	3.8	143
3	Large-eddy simulations of convective boundary layers using nonoscillatory differencing. Physica D: Nonlinear Phenomena, 1999, 133, 390-397.	2.8	118
4	Introduction to â€œAn Arbitrary Lagrangianâ€"Eulerian Computing Method for All Flow Speedsâ€ Journal of Computational Physics, 1997, 135, 198-202.	3.8	104
5	On balanced approximations for time integration of multiple time scale systems. Journal of Computational Physics, 2003, 185, 583-611.	3.8	97
6	Antidiffusive Velocities for Multipass Donor Cell Advection. SIAM Journal of Scientific Computing, 1998, 20, 907-929.	2.8	50
7	Coupled Atmosphericâ€"Fire Modeling Employing the Method of Averages. Monthly Weather Review, 2000, 128, 3683-3691.	1.4	48
8	A generalized Griffith criterion for crack propagation. Engineering Fracture Mechanics, 1984, 19, 539-543.	4.3	47
9	Remapping, recovery and repair on a staggered grid. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 4139-4155.	6.6	40
10	Using a Curvilinear Grid to Construct Symmetry-Preserving Discretizations for Lagrangian Gas Dynamics. Journal of Computational Physics, 1999, 149, 389-417.	3.8	38
11	Finite-scale equations for compressible fluid flow. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2861-2871.	3.4	35
12	Application of the Volume-of-Fluid Method to the Advectionâ€"Condensation Problem. Monthly Weather Review, 1997, 125, 2265-2273.	1.4	32
13	Microphysical models for inelastic material response. International Journal of Engineering Science, 1984, 22, 1171-1179.	5.0	22
14	On Simulating Flows with Multiple Time Scales Using a Method of Averages. Theoretical and Computational Fluid Dynamics, 1997, 9, 281-292.	2.2	21
15	A NUMERICAL LABORATORY FOR GRANULAR SOLIDS. Engineering Computations, 1992, 9, 191-197.	1.4	20
16	Finite scale theory: The role of the observer in classical fluid flow. Mechanics Research Communications, 2014, 57, 10-17.	1.8	18
17	Finite volume methods and the equations of finite scale: A mimetic approach. International Journal for Numerical Methods in Fluids, 2008, 56, 991-1002.	1.6	17
18	Entropy in self-similar shock profiles. International Journal of Non-Linear Mechanics, 2017, 95, 333-346.	2.6	16

#	Article	IF	Citations
19	Nonequilibrium Entropy in a Shock. Entropy, 2017, 19, 368.	2.2	15
20	Traveling wave solutions for finite scale equations. Mechanics Research Communications, 2012, 45, 64-69.	1.8	14
21	MPDATA: gauge transformations, limiters and monotonicity. International Journal for Numerical Methods in Fluids, 2006, 50, 1193-1206.	1.6	8
22	A finite scale model for shock structure. Physica D: Nonlinear Phenomena, 2020, 403, 132308.	2.8	8
23	Fully compressible solutions for early stage Richtmyerâ€“Meshkov instability. Computers and Fluids, 2017, 151, 46-57.	2.5	5
24	Scale matters. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170235.	3.4	5
25	Finite scale theory: Predicting natureâ€™s shocks. Wave Motion, 2020, 98, 102647.	2.0	5
26	Discrete regularization. Evolution Equations and Control Theory, 2019, 8, 117-137.	1.3	5
27	Discrete thermodynamics. Mechanics Research Communications, 2018, 93, 103-107.	1.8	4
28	Numerical validation of a constitutive theory for an arbitrarily fractured solid. Engineering Computations, 1995, 12, 125-134.	1.4	3
29	Damage and Failure in a Statistical Crack Model. Applied Sciences (Switzerland), 2020, 10, 8700.	2.5	2
30	A strain space framework for numerical hyperplasticity. Mathematics and Computers in Simulation, 2016, 127, 178-188.	4.4	0