

Marianne M Francois

List of Publications by Year in descending order

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Version: 2024-02-01

23
papers

1,695
citations

623734

14
h-index

794594

19
g-index

25
all docs

25
docs citations

25
times ranked

1193
citing authors

#	ARTICLE	IF	CITATIONS
1	A balanced-force algorithm for continuous and sharp interfacial surface tension models within a volume tracking framework. <i>Journal of Computational Physics</i> , 2006, 213, 141-173.	3.8	584
2	Estimating curvature from volume fractions. <i>Computers and Structures</i> , 2005, 83, 425-434.	4.4	309
3	Lattice Boltzmann modeling of boiling heat transfer: The boiling curve and the effects of wettability. <i>International Journal of Heat and Mass Transfer</i> , 2015, 85, 787-796.	4.8	278
4	COMPUTATIONS OF DROP DYNAMICS WITH THE IMMERSED BOUNDARY METHOD, PART 2: DROP IMPACT AND HEAT TRANSFER. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2003, 44, 119-143.	0.9	88
5	COMPUTATIONS OF DROP DYNAMICS WITH THE IMMERSED BOUNDARY METHOD, PART 1: NUMERICAL ALGORITHM AND BUOYANCY-INDUCED EFFECT. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2003, 44, 101-118.	0.9	60
6	Lattice Boltzmann modeling of self-propelled Leidenfrost droplets on ratchet surfaces. <i>Soft Matter</i> , 2016, 12, 302-312.	2.7	57
7	Assessment of volume of fluid and immersed boundary methods for droplet computations. <i>International Journal for Numerical Methods in Fluids</i> , 2004, 46, 109-125.	1.6	50
8	Cross-code comparisons of mixing during the implosion of dense cylindrical and spherical shells. <i>Journal of Computational Physics</i> , 2014, 275, 154-173.	3.8	44
9	A second-order accurate material-order-independent interface reconstruction technique for multi-material flow simulations. <i>Journal of Computational Physics</i> , 2009, 228, 731-745.	3.8	41
10	Interface curvature via volume fractions, heights, and mean values on nonuniform rectangular grids. <i>Journal of Computational Physics</i> , 2010, 229, 527-540.	3.8	33
11	Efficient simulation of surface tension-dominated flows through enhanced interface geometry interrogation. <i>Journal of Computational Physics</i> , 2010, 229, 7520-7544.	3.8	28
12	An interface reconstruction method based on an analytical formula for 3D arbitrary convex cells. <i>Journal of Computational Physics</i> , 2016, 305, 63-74.	3.8	28
13	A comparative study of multimaterial Lagrangian and Eulerian methods with pressure relaxation. <i>Computers and Fluids</i> , 2013, 83, 126-136.	2.5	25
14	Material order-independent interface reconstruction using power diagrams. <i>International Journal for Numerical Methods in Fluids</i> , 2008, 56, 643-659.	1.6	20
15	A numerical method for interface reconstruction of triple points within a volume tracking algorithm. <i>Mathematical and Computer Modelling</i> , 2008, 48, 1957-1971.	2.0	13
16	The global embedded interface formulation for interfacial mass transfer within a volume tracking framework. <i>Computers and Fluids</i> , 2013, 87, 102-114.	2.5	8
17	A hybrid incremental projection method for thermal-hydraulics applications. <i>Journal of Computational Physics</i> , 2016, 317, 382-404.	3.8	7
18	Modeling multiphase flow: Spray breakup using volume of fluids in a dynamics LES FEM method. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2017, 72, 285-299.	0.9	7

#	ARTICLE	IF	CITATIONS
19	The Balanced-Force Volume Tracking Algorithm and Global Embedded Interface Formulation for Droplet Dynamics With Mass Transfer. , 2010, , .		5
20	Recent Numerical and Algorithmic Advances within the Volume Tracking Framework for Modeling Interfacial Flows. Procedia IUTAM, 2015, 15, 270-277.	1.2	5
21	Balanced Force Implementation of the Continuum Surface Tension Force Method Into a Pressure Correction Algorithm. , 2003, , 537.		4
22	Volume-of-Fluid Interface Reconstruction Algorithms on Next-Generation Computer Architectures. , 2014, , .		1
23	Portable data-parallel surface reconstruction on a uniform rectilinear grid. International Journal for Numerical Methods in Fluids, 2018, 86, 185-199.	1.6	0