Leh Lin

List of Publications by Year
in descending order

73	776	471509 17	580821 25
papers	citations	h-index	g-index

73	73	73	599
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simulation of nonlinear Westervelt equation for the investigation of acoustic streaming and nonlinear propagation effects. Journal of the Acoustical Society of America, 2013, 134, 3931-3942.	1.1	53
2	A differentially interpolated direct forcing immersed boundary method for predicting incompressible Navierâ€“Stokes equations in time-varying complex geometries. Journal of Computational Physics, 2010, 229, 4476-4500.	3.8	49
3	Eddy structures in a transitional backward-facing step flow. Journal of Fluid Mechanics, 2007, 588, 43-58.	3.4	45
4	Temperature elevation by HIFU inex vivoporcine muscle: MRI measurement and simulation study. Medical Physics, 2014, 41, 052903.	3.0	37
5	On the accuracy assessment of Laplacian models in MPS. Computer Physics Communications, 2014, 185, 2412-2426.	7.5	36
6	Development of a convectionâ€“diffusion-reaction magnetohydrodynamic solver on non-staggered grids. International Journal for Numerical Methods in Fluids, 2004, 45, 1209-1233.	1.6	34
7	A dispersion relation preserving optimized upwind compact difference scheme for high accuracy flow simulations. Journal of Computational Physics, 2014, 278, 378-399.	3.8	34
8	On the development of a dispersion-relation-preserving dual-compact upwind scheme for convectionâ€“diffusion equation. Journal of Computational Physics, 2009, 228, 3640-3655.	3.8	26
9	Three-dimensional analysis for radio-frequency ablation of liver tumor with blood perfusion effect. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 229-240.	1.6	23
10	High-order particle method for solving incompressible Navierâ€“Stokes equations within a mixed Lagrangianâ€“Eulerian framework. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 77-101.	6.6	21
11	AN INCOMPRESSIBLE NAVIER-STOKES MODEL IMPLEMENTED ON NONSTAGGERED GRIDS. Numerical Heat Transfer, Part B: Fundamentals, 2003, 44, 277-394.	0.9	20
12	Development of level set method with good area preservation to predict interface in twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2011, 67, 109-134.	1.6	20
13	Exploration of vortex dynamics for transitional flows in a three-dimensional backward-facing step channel. Journal of Fluid Mechanics, 2006, 550, 61.	3.4	19
14	Newton linearization of the incompressible Navierâ€“Stokes equations. International Journal for Numerical Methods in Fluids, 2004, 44, 297-312.	1.6	18
15	Multiphysics Modeling of Liver Tumor Ablation by High Intensity Focused Ultrasound. Communications in Computational Physics, 2015, 18, 1050-1071.	1.7	18
16	Computational study of acoustic streaming and heating during acoustic hemostasis. Applied Thermal Engineering, 2017, 124, 1112-1122.	6.0	18
17	Fluid-solid conjugate heat transfer modelling using weakly compressible smoothed particle hydrodynamics. International Journal of Mechanical Sciences, 2019, 151, 772-784.	6.7	18
18	A dispersion-relation-preserving algorithm for a nonlinear shallow-water wave equation. Journal of Computational Physics, 2009, 228, 8034-8052.	3.8	17

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19	Dispersion Relation Preserving Combined Compact Difference Schemes for Flow Problems. Journal of Scientific Computing, 2015, 62, 482-516.	2.3	17
20	Development of a Dispersion Relation-Preserving Upwinding Scheme for Incompressible Navierâ€“Stokes Equations on NonStaggered Grids. Numerical Heat Transfer, Part B: Fundamentals, 2005, 48, 543-569.	0.9	15
21	An immersed boundary method for the incompressible Navierâ€“Stokes equations in complex geometry. International Journal for Numerical Methods in Fluids, 2008, 56, 877-898.	1.6	14
22	Development of an electroâ€osmotic flow model to study the dynamic behaviour in human meridian. International Journal for Numerical Methods in Fluids, 2008, 56, 739-751.	1.6	12
23	Numerical study of flow field induced by a locomotive fish in the moving meshes. International Journal for Numerical Methods in Engineering, 2007, 69, 2247-2263.	2.8	11
24	Development of an upwinding kernel in SPH-SWEs model for 1D trans-critical open channel flows. Journal of Hydro-Environment Research, 2017, 15, 13-26.	2.2	10
25	A 1Dâ€“2D coupled SPH-SWE model applied to open channel flow simulations in complicated geometries. Advances in Water Resources, 2018, 115, 185-197.	3.8	10
26	Thermosolutal discharge of double diffusion mixed convection flow with Brownian motion of nanoparticles in a wavy chamber. Journal of Thermal Analysis and Calorimetry, 2022, 147, 7007-7029.	3.6	10
27	On the development of a high-order compact scheme for exhibiting the switching and dissipative solution natures in the Camassaâ€“Holm equation. Journal of Computational Physics, 2011, 230, 5399-5416.	3.8	9
28	Development of an Explicit Symplectic Scheme that Optimizes the Dispersion-Relation Equation of the Maxwellâ€™s Equations. Communications in Computational Physics, 2013, 13, 1107-1133.	1.7	9
29	A conservative numerical scheme for modeling nonlinear acoustic propagation in thermoviscous homogeneous media. Journal of Computational Physics, 2018, 363, 200-230.	3.8	9
30	Finite-element simulation of incompressible fluid flow in an elastic vessel. International Journal for Numerical Methods in Fluids, 2003, 42, 131-146.	1.6	8
31	Development of a Particle Interaction Kernel for Convection-Diffusion Scalar Transport Equation. Numerical Heat Transfer, Part B: Fundamentals, 2011, 60, 96-115.	0.9	8
32	Development of a coupled level set and immersed boundary method for predicting dam break flows. Computer Physics Communications, 2017, 221, 1-18.	7.5	8
33	High-performance multi-GPU solver for describing nonlinear acoustic waves in homogeneous thermoviscous media. Computers and Fluids, 2018, 173, 195-205.	2.5	8
34	Numerical exploration of flow topology and vortex stability in a curved duct. International Journal for Numerical Methods in Engineering, 2007, 71, 564-582.	2.8	7
35	Dispersion relation equation preserving FDTD method for nonlinear cubic SchrÃ¶dinger equation. Journal of Computational Physics, 2015, 299, 1-21.	3.8	7
36	On An Equal Fourth-Order-Accurate Temporal/Spatial Scheme for the Convection-Diffusion Equation. Numerical Heat Transfer, Part B: Fundamentals, 2007, 51, 67-96.	0.9	5

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37	A contrast-enhanced trilateral filter for MR image denoising. , 2011, , .		5
38	Simulation of Incompressible Free Surface Flow Using the Volume Preserving Level Set Method. Communications in Computational Physics, 2015, 18, 931-956.	1.7	5
39	On a Wavenumber Optimized Streamline Upwinding Method for Solving Steady Incompressible Navier-Stokes Equations. Numerical Heat Transfer, Part B: Fundamentals, 2015, 67, 75-99.	0.9	5
40	Development of a 3D staggered FDTD scheme for solving Maxwellâ€™s equations in Drude medium. Computers and Mathematics With Applications, 2016, 71, 1198-1226.	2.7	5
41	Development of a finite element flow solver for solving three-dimensional incompressible Navierâ€“Stokes solutions on multiple GPU cards. Computers and Fluids, 2018, 167, 285-291.	2.5	5
42	An improved mixed Lagrangianâ€“Eulerian (IMLE) method for modelling incompressible Navierâ€“Stokes flows with CUDA programming on multi-GPUs. Computers and Fluids, 2019, 184, 99-106.	2.5	5
43	Experimental and Numerical Study on the Temperature Elevation in Tissue during Moxibustion Therapy. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-10.	1.2	5
44	Bacterial chemotaxis in thin fluid layers with free surface. Physics of Fluids, 2020, 32, 061902.	4.0	5
45	A multi-dimensional monotonic finite element model for solving the convection-diffusion-reaction equation. International Journal for Numerical Methods in Fluids, 2002, 39, 639-656.	1.6	4
46	Development of an Incompressible Navier-Stokes Solver Involving Symplectic and Nonsymplectic Time Integrators. Numerical Heat Transfer, Part B: Fundamentals, 2010, 58, 262-286.	0.9	4
47	Development of an Upwinding Scheme through the Minimization of Modified Wavenumber Error for the Incompressible Navier-Stokes Equations. Numerical Heat Transfer, Part B: Fundamentals, 2011, 60, 179-202.	0.9	4
48	Numerical Simulation of Free Surface by an Area-Preserving Level Set Method. Communications in Computational Physics, 2012, 11, 1347-1371.	1.7	4
49	Development of a Moving and Stationary Mixed Particle Method for Solving the Incompressible Navier-Stokes Equations at High Reynolds Numbers. Numerical Heat Transfer, Part B: Fundamentals, 2012, 62, 71-85.	0.9	4
50	Development of a symplectic and phase error reducing perturbation finite-difference advection scheme. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 136-151.	0.9	4
51	Development of an explicit non-staggered scheme for solving three-dimensional Maxwellâ€™s equations. Computer Physics Communications, 2016, 207, 258-273.	7.5	4
52	Development of a High-Resolution Scheme for Solving the PNP-NS Equations in Curved Channels. Communications in Computational Physics, 2016, 19, 496-533.	1.7	3
53	An improved particle smoothing procedure for Laplacian operator in a randomly scattered cloud. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 111-135.	0.9	3
54	A theoretical Taylor-Galerkin model for first-order hyperbolic equation. International Journal for Numerical Methods in Fluids, 2003, 42, 439-463.	1.6	2

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55	On a high-order Newton linearization method for solving the incompressible Navier-Stokes equations. International Journal for Numerical Methods in Engineering, 2005, 62, 1559-1578.	2.8	2
56	A new high-order particle method for solving high Reynolds number incompressible flows. Computational Particle Mechanics, 2019, 6, 343-370.	3.0	2
57	Development of an adaptive discontinuity-capturing hyperbolic finite element model. International Journal for Numerical Methods in Fluids, 2004, 44, 957-973.	1.6	1
58	Development of a two-dimensional finite element model for pure advective equation. Numerical Methods for Partial Differential Equations, 2004, 20, 302-326.	3.6	1
59	Development of a Locally Analytic Prolongation Operator in the Two-Grid, Three-Level Method for the Navier-Stokes Equations. Numerical Heat Transfer, Part B: Fundamentals, 2006, 50, 517-533.	0.9	1
60	Finite element analysis of three-dimensional vortical flow structure and topology inside a carotid bifurcation model. International Journal of Computational Fluid Dynamics, 2007, 21, 29-36.	1.2	1
61	Numerical Study of an Electro-Osmotically Driven Microchannel Flow with Joule Heating Effect. Numerical Heat Transfer, Part B: Fundamentals, 2009, 55, 503-522.	0.9	1
62	Finite-Element Simulation of Incompressible Viscous Flows in Moving Meshes. Numerical Heat Transfer, Part B: Fundamentals, 2009, 56, 38-57.	0.9	1
63	On the development of a tripleâ€preserving Maxwell's equations solver in nonâ€staggered grids. International Journal for Numerical Methods in Fluids, 2010, 63, 1328-1346.	1.6	1
64	Development of a convectionâ€“diffusionâ€“reaction model for solving Maxwell's equations in frequency domain. International Journal for Numerical Methods in Fluids, 2012, 69, 430-441.	1.6	1
65	Numerical study of the effect of defect layer on unmagnetized plasma photonic crystals. Journal of Computational Electronics, 2014, 13, 313-322.	2.5	1
66	Development of a numerical phase optimized upwinding combined compact difference scheme for solving the Camassa-Holm equation with different initial solitary waves. Numerical Methods for Partial Differential Equations, 2015, 31, 1645-1664.	3.6	1
67	Numerical study of long-time Camassaâ€“Holm solution behavior for soliton transport. Mathematics and Computers in Simulation, 2016, 128, 1-12.	4.4	1
68	Simulation of Maxwell's Equations on GPU Using a High-Order Error-Minimized Scheme. Communications in Computational Physics, 2017, 21, 1039-1064.	1.7	1
69	Prediction of evanescent coupling efficiency in two parallel silica nanowires. Computers and Mathematics With Applications, 2019, 78, 707-722.	2.7	1
70	Development of a class of multiple time-stepping schemes for convectionâ€“diffusion equations in two dimensions. International Journal for Numerical Methods in Fluids, 2006, 52, 1293-1313.	1.6	0
71	Development of a Dispersion Relation Equation - Preserving Pure Advection Scheme for Solving the Navier-Stokes Equations with/Without Free Surface. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 303-335.	0.9	0
72	Development of a Phase-Field Model for Simulating Dendritic Growth in a Convection-Dominated Flow Field. Numerical Heat Transfer, Part B: Fundamentals, 2014, 66, 563-585.	0.9	0

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73	Acceleration of high-order combined compact finite difference scheme for simulating three-dimensional flow and heat transfer problems in GPUs. Numerical Heat Transfer, Part B: Fundamentals, 2020, 78, 265-287.	0.9	0