Rainald LÃ¶hner

List of Publications by Year
in descending order

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233	8,269	44069	53230
papers	citations	48 h-index	85 g-index

239	239	239	4104
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Numerical Modeling of Underwater Explosion with Fluid-Structure Interaction. , 2022, , .		3
2	Simulation of Flow and Pathogen Transport in a Narrow-Body Airplane Cabin. , 2022, , .		0
3	A deterministic pathogen transmission model based on high-fidelity physics. Computer Methods in Applied Mechanics and Engineering, 2022, 401, 114929.	6.6	5
4	A vertex-centered finite volume method with interface sharpening technique for compressible two-phase flows. Journal of Computational Physics, 2022, 460, 111194.	3.8	6
5	A Study of The Motion of Bubbles from Underwater Explosions With Efficient Numerical Solvers. , 2022, , .		1
6	A multiscale approach for the study of particle-laden flows using a continuous model. Computer Methods in Applied Mechanics and Engineering, 2022, 401, 115174.	6.6	4
7	Short note: empirical findings for spatial and temporal discretization orders for the Taylor â€“ Green vortex. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 186-191.	2.8	3
8	Explicit twoâ€step Rungeâ€Kutta methods for computational fluid dynamics solvers. International Journal for Numerical Methods in Fluids, 2021, 93, 429-444.	1.6	3
9	Efficient two-step Runge-Kutta methods for fluid dynamics simulations. Applied Numerical Mathematics, 2021, 159, 1-20.	2.1	6
10	The Jameson way. Computers and Fluids, 2021, 215, 104791.	2.5	0
11	High fidelity modeling of aerosol pathogen propagation in built environments with moving pedestrians. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3428.	2.1	12
12	Overnight industrial LES for external aerodynamics. Computers and Fluids, 2021, 214, 104771.	2.5	5
13	Experiences Porting a High Order Cartesian Finite Difference Solver to GPUs Using OpenACC. , 2021, , .		1
14	Simple Fault-Tolerant Computing for CFD Codes. , 2021, , .		0
15	High-Order Methods for Simulations in Engineering. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2021, , 277-307.	0.6	0
16	A runtime based comparison of highly tuned lattice Boltzmann and finite difference solvers. International Journal of High Performance Computing Applications, 2021, 35, 370-390.	3.7	5
17	A Multiscale Approach for the Numerical Simulation of Turbulent Flows with Droplets. Archives of Computational Methods in Engineering, 2021, 28, 4185-4204.	10.2	11
18	High-Fidelity Simulation of Pathogen Propagation, Transmission and Mitigation in the Built Environment. Archives of Computational Methods in Engineering, 2021, 28, 4237-4262.	10.2	12

#	Article	IF	Citations
19	Literature Review on the Response of Concrete Structures Subjected to Underwater Explosions. CivilEng, 2021, 2, 895-908.	1.4	0
20	Detailed simulation of viral propagation in the built environment. Computational Mechanics, 2020, 66, 1093-1107.	4.0	31
21	Overnight Industrial LES for External Aerodynamics. , 2020, , .		2
22	Simple Fault-tolerant Computing for Field Solvers. International Journal of Computational Fluid Dynamics, 2020, 34, 583-596.	1.2	1
23	Practical applicability of optimizations and performance models to complex stencil-based loop kernels in CFD. International Journal of High Performance Computing Applications, 2019, 33, 602-618.	3.7	5
24	Numerical modeling of the pattern and wear rate on a structural steel plate using DEM. Minerals Engineering, 2019, 137, 290-302.	4.3	22
25	Towards overcoming the LES crisis. International Journal of Computational Fluid Dynamics, 2019, 33, 87-97.	1.2	32
26	Recent Advances in a Cartesian Solver for Industrial LES. , 2019, , .		4
27	Postprocessingâ€based interpolation schemes for nested Cartesian finite difference grids of different size. International Journal for Numerical Methods in Fluids, 2019, 89, 196-215.	1.6	9
28	On Finite Difference Solvers with Minimal Memory Access. , 2018, , .		0
29	Real-time micro-modelling of city evacuations. Computational Particle Mechanics, 2018, 5, 71-86.	3.0	3
30	Running largeâ€scale CFD applications on Intelâ€KNLâ€“based clusters. International Journal for Numerical Methods in Fluids, 2018, 86, 699-716.	1.6	1
31	Using ensemble Kalman filter to determine parameters for computational crowd dynamics simulations. Engineering Computations, 2018, 35, 2612-2628.	1.4	8
32	A coupled fluid FEM-DEM technique for predicting blasting operations in tunnels. Underground Space (China), 2018, 3, 310-316.	7.5	15
33	Recent Advances in Scaling Up Complex Fluid-Structure Interaction Simulations. , 2017, , .		1
34	Load balancing for chemically reacting flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 2768-2774.	2.8	0
35	The simulation of dust effects from fragmenting charges. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 999-1026.	2.8	2
36	Mechanisms Involved in the Formation of Biocompatible Lipid Polymeric Hollow Patchy Particles. Langmuir, 2015, 31, 6639-6648.	3.5	6

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37	Recent advances in computational wind engineering and fluidâ€“structure interaction. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 144, 14-23.	3.9	25
38	A Simple Algorithm to Enforce Mass Conservation for CFD Solvers With Embedded, Moving CSD Surfaces. , 2014, , .		0
39	Validation of a Pedestrian Simulation Tool Using the NIST Stairwell Evacuation Data. Transportation Research Procedia, 2014, 2, 739-744.	1.5	6
40	On Mesh-Particle Techniques. , 2014, , .		0
41	Verification of a Pedestrian Simulation Tool Using the NIST Recommended Test Cases. Transportation Research Procedia, 2014, 2, 237-245.	1.5	12
42	On the Influence of Columns in Densely Populated Corridors. Transportation Research Procedia, 2014, 2, 2-9.	1.5	4
43	On maximum achievable speeds for field solvers. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 1537-1544.	2.8	5
44	Modeling subway air flow using CFD. Tunnelling and Underground Space Technology, 2014, 43, 20-31.	6.2	52
45	Recent Advances in Parallel Advancing Front Grid Generation. Archives of Computational Methods in Engineering, 2014, 21, 127-140.	10.2	34
46	Comparison of Lattice-Boltzmann and Finite Difference Solvers. , 2014, , .		12
47	On mesh-particle techniques. Computational Particle Mechanics, 2014, 1, 199-209.	3.0	12
48	On Critical Densities and Velocities for Pedestrians Entering a Crowd. Transportation Research Procedia, 2014, 2, 394-399.	1.5	7
49	Scaling Up Multiphysics. Computational Methods in Applied Sciences (Springer), 2014, , 389-403.	0.3	1
50	Handling tens of thousands of cores with industrial/legacy codes: Approaches, implementation and timings. Computers and Fluids, 2013, 85, 53-62.	2.5	14
51	Improved error and work estimates for highâ€order elements. International Journal for Numerical Methods in Fluids, 2013, 72, 1207-1218.	1.6	28
52	A 2nd Generation Parallel Advancing Front Grid Generator. , 2013, , 457-474.		16
53	Load Balancing for Multiphysics. , 2013, , .		1
54	On the Achievable Speeds of Finite Difference Solvers on CPUs and GPUs. , 2013, , .		9

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55	Inter-Element Stabilization for Linear Large-Deformation Elements to Solve Coupled CFD/CSD Blast and Impact problems. , 2013, , .		0
56	Advances in Feflo. , 2013, , .		3
57	Cavity-Based Operators for Mesh Adaptation. , 2013, , .		29
58	A 2nd Generation Parallel Advancing Front Grid Generator. , 2013, , .		3
59	Large-Scale Blast Calculations on GPU Clusters. , 2012, , .		1
60	An assessment of architecturally appealing, semi-open shock mitigation devices. Engineering Computations, 2012, 29, 19-30.	1.4	1
61	Improved Error and Work Estimates for High Order Elements. , 2012, , .		1
62	Semiâ€automatic porting of a largeâ€scale Fortran CFD code to GPUs. International Journal for Numerical Methods in Fluids, 2012, 69, 314-331.	1.6	44
63	Experimental and numerical analysis of a sphere falling into a viscous fluid. International Journal for Numerical Methods in Fluids, 2012, 69, 1496-1521.	1.6	6
64	Semiâ€automatic porting of a largeâ€scale CFD code to multiâ€graphics processing unit clusters. International Journal for Numerical Methods in Fluids, 2012, 69, 1786-1796.	1.6	8
65	Generating seamless surfaces for transport and dispersion modeling in GIS. GeoInformatica, 2012, 16, 307-327.	2.7	11
66	Combinatorial Aspects/Algorithms in Computational Fluid Dynamics. Chapman & Hall/CRC Computational Science, 2012, , 233-256.	0.5	0
67	Timings of FEFLO on the SGI-Ice Machines. , 2011, , .		4
68	Error and Work Estimates for High-Order Elements. , 2011, , .		2
69	Simulation of Separation of Stores Partially Filled with Fluids. , 2011, , .		0
70	Semi-Automatic Porting of a General Fortran CFD Code to GPUS: the Difficult Modules. , 2011, , .		4
71	Deflated Solvers for Linear Elasticity and Helmholtz Equation. , 2011, , .		0
72	Porting of FEFLO to Multi-GPU Clusters. , 2011, , .		7

#	Article	IF	Citations
73	Running unstructured gridâ€based CFD solvers on modern graphics hardware. International Journal for Numerical Methods in Fluids, 2011, 66, 221-229.	1.6	110
74	Deflated preconditioned conjugate gradient solvers for the pressureâ€Poisson equation: Extensions and improvements. International Journal for Numerical Methods in Engineering, 2011, 87, 2-14.	2.8	43
75	Error and work estimates for highâ€order elements. International Journal for Numerical Methods in Fluids, 2011, 67, 2184-2188.	1.6	15
76	Computational hemodynamics framework for the analysis of cerebral aneurysms. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 822-839.	2.1	78
77	Validation of the computational fluidâ€“structure interaction simulation at real-scale tests of a flexible 29m umbrella in natural wind flow. Journal of Wind Engineering and Industrial Aerodynamics, 2011, 99, 400-413.	3.9	50
78	Adjoint-based design of shock mitigation devices. International Journal for Numerical Methods in Fluids, 2010, 64, 443-472.	1.6	15
79	Cache-efficient renumbering for vectorization. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, n/a-n/a.	2.1	3
80	Fast numerical solutions of patientâ€specific blood flows in 3D arterial systems. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 73-85.	2.1	58
81	Hemodynamic analysis of intracranial aneurysms with moving parent arteries: Basilar tip aneurysms. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 1219-1227.	2.1	29
82	Advancing front techniques for filling space with arbitrary separated objects. Finite Elements in Analysis and Design, 2010, 46, 140-151.	3.2	14
83	On the modeling of pedestrian motion. Applied Mathematical Modelling, 2010, 34, 366-382.	4.2	101
84	On the simulation of highly nonlinear wave-breakwater interactions. Journal of Hydrodynamics, 2010, 22, 932-938.	3.2	13
85	Hybrid Grid Generation Method for Complex Geometries. AIAA Journal, 2010, 48, 2639-2647.	2.6	19
86	Deflated Preconditioned Conjugate Gradient Solvers: Extensions and Improvements. , 2010, , .		1
87	Adjoint-Based Design of Passive and Active Shock Mitigation Devices. , 2010, , .		3
88	Anisotropic Adaptive Simulations in Aerodynamics. , 2010, , .		49
89	Porting of an Edge-Based CFD Solver to GPUs. , 2010, , .		14
90	Simulation of Multiphase Blast-Structure Interaction via Coupled CFD and CSD Codes. , 2010, , .		2

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91	Large-Eddy Simulations of a Supersonic Jet and Its Near-Field Acoustic Properties. AIAA Journal, 2009, 47, 1849-1865.	2.6	100
92	Image-based analysis of blood flow modification in stented aneurysms. Proceedings of SPIE, 2009, , .	0.8	3
93	A hybrid buildingâ€block and gridless method for compressible flows. International Journal for Numerical Methods in Fluids, 2009, 59, 459-474.	1.6	9
94	Generation of viscous grids at ridges and corners. International Journal for Numerical Methods in Engineering, 2009, 77, 1247-1289.	2.8	51
95	An advancing front technique for filling space with arbitrary separated objects. International Journal for Numerical Methods in Engineering, 2009, 78, 1618-1630.	2.8	3
96	Numerical simulation of H2/air detonation using unstructured mesh. Shock Waves, 2009, 19, 151-162.	1.9	20
97	Simulation of intracranial aneurysm stenting: Techniques and challenges. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3567-3582.	6.6	86
98	Numerical Simulation of Long-Duration Blast Wave Evolution in Confined Facilities. , 2009, , .		5
99	Coarse-Grain Deflation for Preconditioned Conjugate Gradient Solvers: Application to the Pressure Poisson Equation. , 2009, , .		0
100	Adjoint-Based Design of Shock Mitigation Devices. , 2009, , .		2
101	On the â€˜most normalâ€™ normal. Communications in Numerical Methods in Engineering, 2008, 24, 1641-1652.	1.3	30
102	Deflated preconditioned conjugate gradient solvers for the Pressureâ€“Poisson equation. Journal of Computational Physics, 2008, 227, 10196-10208.	3.8	39
103	On the computation of steady-state compressible flows using a discontinuous Galerkin method. International Journal for Numerical Methods in Engineering, 2008, 73, 597-623.	2.8	71
104	Improvements in speed for explicit, transient compressible flow solvers. International Journal for Numerical Methods in Fluids, 2008, 56, 2229-2244.	1.6	14
105	Comparison of bodyâ€fitted, embedded and immersed solutions of low Reynoldsâ€number 3â€D incompressible flows. International Journal for Numerical Methods in Fluids, 2008, 57, 13-30.	1.6	20
106	A discontinuous Galerkin method based on a Taylor basis for the compressible flows on arbitrary grids. Journal of Computational Physics, 2008, 227, 8875-8893.	3.8	208
107	Adaptive embedded and immersed unstructured grid techniques. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 2173-2197.	6.6	86
108	Timings of an Unstructured-Grid CFD Code on Common Hardware Platforms and Compilers. , 2008, , .		1

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109	Improvements in Speed for Explicit, Transient Compressible Flow Solvers. , 2008, , .		1
110	SIMPACT-FEFLO Coupling: Recent Advances. , 2008, , .		0
111	Extensions and Improvements of a RANS Grid Generator. , 2008, , .		1
112	Fast p-Multigrid Discontinuous Galerkin Method for Compressible Flows at All Speeds. AIAA Journal, 2008, 46, 635-652.	2.6	75
113	Computational modelling of blood flow in side arterial branches after stenting of cerebral aneurysms. International Journal of Computational Fluid Dynamics, 2008, 22, 669-676.	1.2	29
114	Combination of bodyâ€fitted and embedded grids for external vehicle aerodynamics. Engineering Computations, 2008, 25, 28-41.	1.4	16
115	Simulation of flows with violent free surface motion and moving objects using unstructured grids. International Journal for Numerical Methods in Fluids, 2007, 53, 1315-1338.	1.6	59
116	Timings of an Unstructured-Grid CFD Code on Common Hardware Platforms and Compilers. , 2007, , .		4
117	Comparison of Body-Fitted, Embedded and Immersed 3-D Euler Predictions for Blast Loads on Columns. , 2007, , .		6
118	Comparison of Body-Fitted, Embedded and Immersed Solutions of Low Reynolds-Number Incompressible Flows. , 2007, , .		3
119	Combination of Body-Fitted and Embedded Grids for External Vehicle Aerodynamics. , 2007, , .		1
120	Generation of Viscous Grid with Ridges and Corners. , 2007, , .		3
121	Assessment of a Lagrangian Incompressible Flow Code. , 2007, , .		0
122	Parabolic recovery of boundary gradients. Communications in Numerical Methods in Engineering, 2007, 24, 1611-1615.	1.3	11
123	A Hermite WENO-based limiter for discontinuous Galerkin method on unstructured grids. Journal of Computational Physics, 2007, 225, 686-713.	3.8	477
124	A Godunov-Type Scheme for Atmospheric Flows on Unstructured Grids: Euler and Navier-Stokes Equations. Pure and Applied Geophysics, 2007, 164, 217-244.	1.9	3
125	Adaptive Embedded/Immersed Unstructured Grid Techniques. Archives of Computational Methods in Engineering, 2007, 14, 279-301.	10.2	26
126	VLES Study of Flow and Dispersion Patterns in Heterogeneous Urban Areas. , 2006, , .		26

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127	Modeling of Near-Field Blast Wave Evolution. , 2006, , .		7
128	A Hybrid Building-Block and Gridless Method for Compressible Flows. , 2006, , .		3
129	An unstructured-grid based volume-of-fluid method for extreme wave and freely-floating structure interactions. Journal of Hydrodynamics, 2006, 18, 405-412.	3.2	1
130	An unstructured-grid based volume-of-fluid method for extreme wave and freely-floating structure interactions. Journal of Hydrodynamics, 2006, 18, 415-422.	3.2	23
131	Improving the speed and accuracy of projection-type incompressible flow solvers. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3087-3109.	6.6	32
132	On the simulation of flows with violent free surface motion. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5597-5620.	6.6	83
133	A p-multigrid discontinuous Galerkin method for the Euler equations on unstructured grids. Journal of Computational Physics, 2006, 211, 767-783.	3.8	167
134	A hybrid Cartesian grid and gridless method for compressible flows. Journal of Computational Physics, 2006, 214, 618-632.	3.8	53
135	A Godunov-Type Scheme for Atmospheric Flows on Unstructured Grids: Scalar Transport. Pure and Applied Geophysics, 2006, 163, 1699-1735.	1.9	2
136	Finite element approximation of complex functions for spatial optimization and search. Communications in Numerical Methods in Engineering, 2006, 22, 823-830.	1.3	0
137	The empty bin: A data structure for spatial search of time-varying data. Communications in Numerical Methods in Engineering, 2006, 23, 1111-1119.	1.3	6
138	Extending the Range and Applicability of the Loose Coupling Approach for FSI Simulations. , 2006, , 82-100.		39
139	Optimal placement of sensors for contaminant detection based on detailed 3D CFD simulations. Engineering Computations, 2005, 22, 260-273.	1.4	37
140	Selective edge removal for unstructured grids with Cartesian cores. Journal of Computational Physics, 2005, 206, 208-226.	3.8	5
141	Extension of Harten-Lax-van Leer Scheme for Flows at All Speeds.. AIAA Journal, 2005, 43, 1160-1166.	2.6	48
142	High-Reynolds Number Viscous Flow Computations Using an Unstructured-Grid Method. Journal of Aircraft, 2005, 42, 483-492.	2.4	30
143	Efficient simulation of blood flow past complex endovascular devices using an adaptive embedding technique. IEEE Transactions on Medical Imaging, 2005, 24, 468-476.	8.9	121
144	On the Loose Coupling of Implicit Time-Marching Codes. , 2005, , .		6

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145	VLES Study of MUST Experiment. , 2005, , .		12
146	A Hybrid Cartesian Grid and Gridless Method for Compressible Flows. , 2005, , .		8
147	Selective Edge Removal for Unstructured Grids with Cartesian Cores. , 2005, , .		1
148	Multistage explicit advective prediction for projection-type incompressible flow solvers. Journal of Computational Physics, 2004, 195, 143-152.	3.8	43
149	Dynamic deactivation for advection-dominated contaminant transport. Communications in Numerical Methods in Engineering, 2004, 20, 639-646.	1.3	7
150	Projective prediction of pressure increments. Communications in Numerical Methods in Engineering, 2004, 21, 201-207.	1.3	11
151	A general advancing front technique for filling space with arbitrary objects. International Journal for Numerical Methods in Engineering, 2004, 61, 1977-1991.	2.8	56
152	Adaptive embedded unstructured grid methods. International Journal for Numerical Methods in Engineering, 2004, 60, 641-660.	2.8	69
153	On the computation of multi-material flows using ALE formulation. Journal of Computational Physics, 2004, 194, 304-328.	3.8	152
154	High-Reynolds Number Viscous Flow Computations Using Unstructured-Grid Method. , 2004, , .		9
155	VLES Study of Ship Stack Gas Dynamics. , 2004, , .		20
156	Advances in Adaptive Embedded Unstructured Grid Methods. , 2004, , .		5
157	Assessing maximum possible damage for contaminant release events. Engineering Computations, 2004, 21, 748-760.	1.4	27
158	Blood-flow models of the circle of Willis from magnetic resonance data. Journal of Engineering Mathematics, 2003, 47, 369-386.	1.2	98
159	Applications of patient-specific CFD in medicine and life sciences. International Journal for Numerical Methods in Fluids, 2003, 43, 637-650.	1.6	27
160	Unstructured Navier-Stokes grid generation at corners and ridges. International Journal for Numerical Methods in Fluids, 2003, 43, 717-728.	1.6	38
161	A linelet preconditioner for incompressible flow solvers. International Journal of Numerical Methods for Heat and Fluid Flow, 2003, 13, 133-147.	2.8	38
162	Parallel Unstructured Grid GMRES+LU-SGS Method for Turbulent Flows. , 2003, , .		14

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163	Improving the Speed and Accuracy of Projection-Type Incompressible Flow Solvers. , 2003, , .		8
164	Topside LPD17 Flow and Temperature Study with an Implicit Monolithic Scheme. , 2003, , .		6
165	Computation of Compressible Flows using a Two-equation Turbulence Model on Unstructured Grids. International Journal of Computational Fluid Dynamics, 2003, 17, 87-93.	1.2	3
166	Calculation of Ship Sinkage and Trim Using a Finite Element Method and Unstructured Grids. International Journal of Computational Fluid Dynamics, 2002, 16, 217-227.	1.2	23
167	Blood Flow Modeling in Carotid Arteries with Computational Fluid Dynamics and MR Imaging. Academic Radiology, 2002, 9, 1286-1299.	2.5	132
168	A finite point method for compressible flow. International Journal for Numerical Methods in Engineering, 2002, 53, 1765-1779.	2.8	92
169	A feature-preserving volumetric technique to merge surface triangulations. International Journal for Numerical Methods in Engineering, 2002, 55, 177-190.	2.8	8
170	Minimization of indirect addressing for edge-based field solvers. Communications in Numerical Methods in Engineering, 2002, 18, 335-343.	1.3	35
171	Fluid dynamics of flapping aquatic flight in the bird wrasse: three-dimensional unsteady computations with fin deformation. Journal of Experimental Biology, 2002, 205, 2997-3008.	1.7	45
172	On the Computation of Compressible Turbulent Flows on Unstructured Grids. International Journal of Computational Fluid Dynamics, 2001, 14, 253-270.	1.2	14
173	An accurate, fast, matrix-free implicit method for computing unsteady flows on unstructured grids. Computers and Fluids, 2001, 30, 137-159.	2.5	88
174	From medical images to anatomically accurate finite element grids. International Journal for Numerical Methods in Engineering, 2001, 51, 985-1008.	2.8	138
175	Merging of intersecting triangulations for finite element modeling. Journal of Biomechanics, 2001, 34, 815-819.	2.1	67
176	A parallel advancing front grid generation scheme. International Journal for Numerical Methods in Engineering, 2001, 51, 663-678.	2.8	54
177	A Class of Matrix-Free Implicit Methods for Compressible Flows on Unstructured Grids. , 2001, , 93-98.		2
178	A Fast, Matrix-free Implicit Method for Computing Low Mach Number Flows on Unstructured Grids. International Journal of Computational Fluid Dynamics, 2000, 14, 133-157.	1.2	19
179	Generation of non-isotropic unstructured grids via directional enrichment. International Journal for Numerical Methods in Engineering, 2000, 49, 219-232.	2.8	44
180	A parallel advancing front grid generation scheme. , 2000, , .		10

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181	An unstructured grid-based, parallel free surface solver. Applied Numerical Mathematics, 1999, 31, 271-293.	2.1	58
182	Surface triangulation over intersecting geometries. International Journal for Numerical Methods in Engineering, 1999, 44, 1359-1376.	2.8	33
183	The numerical simulation of strongly unsteady flow with hundreds of moving bodies. International Journal for Numerical Methods in Fluids, 1999, 31, 113-120.	1.6	40
184	A coupled CFD/CSD methodology for modeling weapon detonation and fragmentation. , 1999, , .		27
185	An accurate, fast, matrix-free implicit method for computing unsteady flows on unstructured grids. , 1999, , .		13
186	Computation of the 3-D Unsteady Flow Past Deforming Geometries. International Journal of Computational Fluid Dynamics, 1999, 13, 83-99.	1.2	41
187	Generation of unstructured grids suitable for RANS calculations. , 1999, , .		18
188	A Fast, Matrix-free Implicit Method for Compressible Flows on Unstructured Grids. Journal of Computational Physics, 1998, 146, 664-690.	3.8	266
189	Parallelizing the construction of indirect access arrays for shared-memory machines. Communications in Numerical Methods in Engineering, 1998, 14, 773-781.	1.3	22
190	An advancing front point generation technique. , 1998, 14, 1097-1108.		51
191	Renumbering strategies for unstructured-grid solvers operating on shared-memory, cache-based parallel machines. Computer Methods in Applied Mechanics and Engineering, 1998, 163, 95-109.	6.6	85
192	Conservative Load Projection and Tracking for Fluid-Structure Problems. AIAA Journal, 1997, 35, 687-692.	2.6	145
193	Automatic unstructured grid generators. Finite Elements in Analysis and Design, 1997, 25, 111-134.	3.2	124
194	Extensions and improvements of the advancing front grid generation technique. Communications in Numerical Methods in Engineering, 1996, 12, 683-702.	1.3	74
195	Regridding Surface Triangulations. Journal of Computational Physics, 1996, 126, 1-10.	3.8	161
196	Three-dimensional parallel unstructured grid generation. International Journal for Numerical Methods in Engineering, 1995, 38, 905-925.	2.8	52
197	Mesh adaptation in fluid mechanics. Engineering Fracture Mechanics, 1995, 50, 819-847.	4.3	41
198	Robust, Vectorized Search Algorithms for Interpolation on Unstructured Grids. Journal of Computational Physics, 1995, 118, 380-387.	3.8	130

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199	Finite element simulation of a turbulent MHD system: comparison to a pseudo-spectral simulation. Computer Physics Communications, 1995, 86, 25-39.	7.5	6
200	Edge-based finite element scheme for the Euler equations. AIAA Journal, 1994, 32, 1183-1190.	2.6	147
201	Numerical simulation of shock-box interaction using an adaptive finite element scheme. AIAA Journal, 1994, 32, 682-692.	2.6	17
202	Electromagnetics via the Taylor-Galerkin Finite Element Method on Unstructured Grids. Journal of Computational Physics, 1994, 110, 310-319.	3.8	17
203	Ray tracing with a space-filling finite element mesh. International Journal for Numerical Methods in Engineering, 1994, 37, 3571-3580.	2.8	7
204	Edges, stars, superedges and chains. Computer Methods in Applied Mechanics and Engineering, 1994, 111, 255-263.	6.6	20
205	Some useful renumbering strategies for unstructured grids. International Journal for Numerical Methods in Engineering, 1993, 36, 3259-3270.	2.8	49
206	Parallel unstructured grid generation. Computer Methods in Applied Mechanics and Engineering, 1992, 95, 343-357.	6.6	78
207	Adaptiveh-refinement on 3D unstructured grids for transient problems. International Journal for Numerical Methods in Fluids, 1992, 14, 1407-1419.	1.6	148
208	Numerical Simulation of Shock Interaction With a Modern Main Battlefield Tank. , 1991, , .		21
209	A vectorized particle tracer for unstructured grids. Journal of Computational Physics, 1990, 91, 22-31.	3.8	131
210	A fast finite element solver for incompressible flows. , 1990, , .		15
211	Adaptive remeshing for transient problems. Computer Methods in Applied Mechanics and Engineering, 1989, 75, 195-214.	6.6	118
212	Generation of three-dimensional unstructured grids by the advancing-front method. International Journal for Numerical Methods in Fluids, 1988, 8, 1135-1149.	1.6	520
213	Some useful data structures for the generation of unstructured grids. Communications in Applied Numerical Methods, 1988, 4, 123-135.	0.5	169
214	Finite element flux-corrected transport (FEM-FCT) for the euler and Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 1987, 7, 1093-1109.	1.6	379
215	An adaptive finite element scheme for transient problems in CFD. Computer Methods in Applied Mechanics and Engineering, 1987, 61, 323-338.	6.6	270
216	Introduction and General Considerations. , 0, , 1-6.		0

#	Article	IF	Citations
217	Grid Generation. , 0, , 35-107.		0
218	Approximation Theory. , 0, , 109-122.		0
219	Efficient Use of Computer Hardware. , 0, , 299-350.		1
220	Embedded and Immersed Grid Techniques. , 0, , 383-417.		1
221	Edge-Based Compressible Flow Solvers. , 0, , 187-200.		0
222	Mesh Movement. , 0, , 227-243.		0
223	Adaptive Mesh Refinement. , 0, , 269-297.		1
224	Space-Marching and Deactivation. , 0, , 351-369.		0
225	Overlapping Grids. , 0, , 371-381.		0
226	Treatment of Free Surfaces. , 0, , 419-448.		0
227	Data Structures and Algorithms. , 0, , 7-33.		0
228	Optimal Shape and Process Design. , 0, , 449-480.		0
229	Approximation of Operators. , 0, , 123-132.		0
230	Discretization in Time. , 0, , 133-136.		0
231	Solution of Large Systems of Equations. , 0, , 137-159.		0
232	Simple Euler/Navierâ€“Stokes Solvers. , 0, , 161-173.		0
233	Flux-Corrected Transport Schemes. , 0, , 175-185.		0