pierre Sagaut

List of Publications by Year in Descending Order

332 papers	9,455 citations	52 h-index	85 g-index
362 ext. papers	10,965 ext. citations	3.3 avg, IF	6.68 L-index

#	Paper	IF	Citations
332	Hydrodynamic limits and numerical errors of isothermal lattice Boltzmann schemes. *Journal of Computational Physics*, **2022**, 450, 110858	4.1	5
331	Restoring the conservativity of characteristic-based segregated models: Application to the hybrid lattice Boltzmann method. *Physics of Fluids*, **2022**, 34, 046102	4.4	
330	Large eddy simulation of a thermal impinging jet using the lattice Boltzmann method. *Physics of Fluids*, **2022**, 34, 055115	4.4	0
329	A theoretical analysis of mass leakage at boundaries within the lattice Boltzmann method. *Physics of Fluids*, **2022**, 34, 065113	4.4	1
328	Large-eddy lattice-Boltzmann modeling of transonic flows. *Physics of Fluids*, **2021**, 33, 115112	4.4	3
327	Large temperature difference heat dominated flow simulations using a pressure-based lattice Boltzmann method with mass correction. *Physics of Fluids*, **2021**, 33, 116107	4.4	1
326	Hybrid lattice Boltzmann model for atmospheric flows under anelastic approximation. *Physics of Fluids*, **2021**, 33, 036607	4.4	3
325	A new linear forcing method for isotropic turbulence with controlled integral length scale. *Physics of Fluids*, **2021**, 33, 045127	4.4	2
324	On the use of conservative formulation of energy equation in hybrid compressible lattice Boltzmann method. *Computers and Fluids*, **2021**, 219, 104866	2.8	2
323	Improved compressible hybrid lattice Boltzmann method on standard lattice for subsonic and supersonic flows. *Computers and Fluids*, **2021**, 219, 104867	2.8	18
322	Explicit wall models for large eddy simulation. *Physics of Fluids*, **2021**, 33, 041703	4.4	3
321	Lattice-Boltzmann-based large-eddy simulation of high-rise building aerodynamics with inlet turbulence reconstruction. *Journal of Wind Engineering and Industrial Aerodynamics*, **2021**, 212, 104560	3.7	7
320	A lattice Boltzmann direct coupling overset approach for the moving boundary problem. *Physics of Fluids*, **2021**, 33, 053607	4.4	2
319	A hybrid recursive regularized lattice Boltzmann model with overset grids for rotating geometries. *Physics of Fluids*, **2021**, 33, 057113	4.4	5
318	Lattice Boltzmann Method-Based Simulations of Pollutant Dispersion and Urban Physics. *Atmosphere*, **2021**, 12, 833	2.7	0
317	Compressible pressure-based Lattice-Boltzmann applied to humid air with phase change. *Applied Thermal Engineering*, **2021**, 191, 116868	5.8	4
316	A New Explicit Algebraic Wall Model for LES of Turbulent Flows Under Adverse Pressure Gradient. *Flow, Turbulence and Combustion*, **2021**, 106, 1-35	2.5	10

315	Coupling of turbulence wall models and immersed boundaries on Cartesian grids. *Journal of Computational Physics*, **2021**, 429, 109995	4.1	10
314	ProLB: A Lattice Boltzmann Solver of Large-Eddy Simulation for Atmospheric Boundary Layer Flows. *Journal of Advances in Modeling Earth Systems*, **2021**, 13, e2020MS002107	7.1	5
313	A unified hybrid lattice-Boltzmann method for compressible flows: Bridging between pressure-based and density-based methods. *Physics of Fluids*, **2021**, 33, 086101	4.4	5
312	Immersed boundary conditions for moving objects in turbulent flows with the lattice-Boltzmann method. *Physics of Fluids*, **2021**, 33, 095101	4.4	6
311	Improved wall model treatment for aerodynamic flows in LBM. *Computers and Fluids*, **2021**, 227, 105041	2.8	3
310	A Finite Element Penalized Direct Forcing Immersed Boundary Method for infinitely thin obstacles in a dilatable flow. *Computers and Mathematics With Applications*, **2021**, 99, 292-304	2.7	0
309	A multidisciplinary model coupling Lattice-Boltzmann-based CFD and a Social Force Model for the simulation of pollutant dispersion in evacuation situations. *Building and Environment*, **2021**, 205, 108212	6.5	3
308	Lattice Boltzmann method for computational aeroacoustics on non-uniform meshes: A direct grid coupling approach. *Journal of Computational Physics*, **2021**, 447, 110667	4.1	8
307	A linear stability analysis of compressible hybrid lattice Boltzmann methods. *Journal of Computational Physics*, **2021**, 446, 110649	4.1	6
306	Improved standard thermal lattice Boltzmann model with hybrid recursive regularization for compressible laminar and turbulent flows. *Physics of Fluids*, **2020**, 32, 126108	4.4	9
305	A pressure-based regularized lattice-Boltzmann method for the simulation of compressible flows. *Physics of Fluids*, **2020**, 32, 066106	4.4	23
304	Grid refinement in the three-dimensional hybrid recursive regularized lattice Boltzmann method for compressible aerodynamics. *Physical Review E*, **2020**, 101, 063302	2.4	6
303	Numerical investigation of skewed spatially evolving mixing layers. *Journal of Fluid Mechanics*, **2020** , 897,	3.7	1
302	Analysis and reduction of spurious noise generated at grid refinement interfaces with the lattice Boltzmann method. *Journal of Computational Physics*, **2020**, 418, 109645	4.1	14
301	Consistent vortex initialization for the athermal lattice Boltzmann method. *Physical Review E*, **2020**, 101, 043306	2.4	5
300	An efficient lattice Boltzmann method for compressible aerodynamics on D3Q19 lattice. *Journal of Computational Physics*, **2020**, 418, 109570	4.1	26
299	Toward fully conservative hybrid lattice Boltzmann methods for compressible flows. *Physics of Fluids*, **2020**, 32, 126118	4.4	11
298	Macroscopic model of fluid structure interaction in cylinder arrangement using theory of mixture. *Computers and Fluids*, **2020**, 202, 104499	2.8	1

297	Hybrid recursive regularized lattice Boltzmann simulation of humid air with application to meteorological flows. *Physical Review E*, **2019**, 100, 023304	2.4	19
296	Hybrid recursive regularized thermal lattice Boltzmann model for high subsonic compressible flows. *Journal of Computational Physics*, **2019**, 394, 82-99	4.1	54
295	Interaction of two-dimensional spots with a heat releasing/absorbing shock wave: linear interaction approximation results. *Journal of Fluid Mechanics*, **2019**, 871, 865-895	3.7	8
294	Shape Optimization Using the Adjoint Lattice Boltzmann Method for Aerodynamic Applications. *AIAA Journal*, **2019**, 57, 2758-2773	2.1	7
293	Uncertainty quantification for acoustic wave propagation in a shallow water environment. *Wave Motion*, **2019**, 91, 102390	1.8	2
292	3D global optimal forcing and response of the supersonic boundary layer. *Journal of Computational Physics*, **2019**, 398, 108888	4.1	5
291	Solid wall and open boundary conditions in hybrid recursive regularized lattice Boltzmann method for compressible flows. *Physics of Fluids*, **2019**, 31, 126103	4.4	18
290	An extended spectral analysis of the lattice Boltzmann method: modal interactions and stability issues. *Journal of Computational Physics*, **2019**, 380, 311-333	4.1	32
289	Lattice-Boltzmann large-eddy simulation of pollutant dispersion in complex urban environment with dense gas effect: Model evaluation and flow analysis. *Building and Environment*, **2019**, 148, 634-652	6.5	16
288	Sound-Source Localization in Range-Dependent Shallow-Water Environments Using a Four-Layer Model. *IEEE Journal of Oceanic Engineering*, **2019**, 44, 220-228	3.3	5
287	Incompressible Homogeneous Anisotropic Turbulence: With Strain **2018**, 403-437		
286	Isotropic Turbulence with Coupled Microstructures. II: Quantum Turbulence **2018**, 269-351		
285	Compressible Homogeneous Isotropic Turbulence **2018**, 621-689		
284	A Kriging-based elliptic extended anisotropic model for the turbulent boundary layer wall pressure spectrum. *Journal of Fluid Mechanics*, **2018**, 840, 25-55	3.7	8
283	Aerodynamic Data Predictions for Transonic Flows via a Machine-Learning-based Surrogate Model **2018**,		2
282	Incompressible Homogeneous Isotropic Turbulence **2018**, 99-244		1
281	The Essentials of Linear and Nonlinear Theories and Models **2018**, 831-880		
280	Governing Equations, from Dynamics to Statistics **2018**, 13-73		1

279	Investigation of anomalous very fast decay regimes in homogeneous isotropic turbulence. *Journal of Turbulence*, **2018**, 19, 390-413	2.1	9
278	Reliability of Large-Eddy Simulations: Benchmarking and Uncertainty Quantification. *ERCOFTAC Series*, **2018**, 15-23	0.1	2
277	Incompressible Homogeneous Anisotropic Turbulence: Buoyancy Force and Mean Stratification **2018**, 485-533		
276	Incompressible Homogeneous Anisotropic Turbulence: Pure Shear **2018**, 439-484		
275	Surrogate Modeling of Aerodynamic Simulations for Multiple Operating Conditions Using Machine Learning. *AIAA Journal*, **2018**, 56, 3622-3635	2.1	8
274	Regularized thermal lattice Boltzmann method for natural convection with large temperature differences. *International Journal of Heat and Mass Transfer*, **2018**, 125, 1379-1391	4.9	24
273	Extended integral wall-model for large-eddy simulations of compressible wall-bounded turbulent flows. *Physics of Fluids*, **2018**, 30, 065106	4.4	10
272	Homogeneous Turbulence Dynamics **2018**,		37
271	Lattice-Boltzmann Large-Eddy Simulation of pollutant dispersion in street canyons including tree planting effects. *Atmospheric Environment*, **2018**, 195, 89-103	5.3	20
270	A new hybrid recursive regularised BhatnagarGrossKrook collision model for Lattice Boltzmann method-based large eddy simulation. *Journal of Turbulence*, **2018**, 19, 1051-1076	2.1	49
269	Wind comfort assessment by means of large eddy simulation with lattice Boltzmann method in full scale city area. *Building and Environment*, **2018**, 139, 110-124	6.5	41
268	Advanced spectral anisotropic modelling for shear flows. *Journal of Turbulence*, **2018**, 19, 570-599	2.1	3
267	An explicit power-law-based wall model for lattice Boltzmann methodReynolds-averaged numerical simulations of the flow around airfoils. *Physics of Fluids*, **2018**, 30, 065111	4.4	39
266	Shallow water sound source localization using the iterative beamforming method in an image framework. *Journal of Sound and Vibration*, **2017**, 395, 354-370	3.9	12
265	Revisiting the spectral analysis for high-order spectral discontinuous methods. *Journal of Computational Physics*, **2017**, 337, 379-402	4.1	26
264	Turbulence in a box: quantification of large-scale resolution effects in isotropic turbulence free decay. *Journal of Fluid Mechanics*, **2017**, 818, 697-715	3.7	13
263	Data assimilation-based reconstruction of urban pollutant release characteristics. *Journal of Wind Engineering and Industrial Aerodynamics*, **2017**, 169, 232-250	3.7	19
262	Turbulence Direct Numerical Simulation and Large-Eddy Simulation **2017**, 1-31		

261	Grid refinement for aeroacoustics in the lattice Boltzmann method: A directional splitting approach. *Physical Review E*, **2017**, 96, 023311	2.4	22
260	Global spectral analysis of three-time level integration schemes: Focusing phenomenon. *Computers and Fluids*, **2017**, 157, 182-195	2.8	5
259	Recursive regularization step for high-order lattice Boltzmann methods. *Physical Review E*, **2017**, 96, 033306	2.4	75
258	Optimal sensor placement for variational data assimilation of unsteady flows past a rotationally oscillating cylinder. *Journal of Fluid Mechanics*, **2017**, 823, 230-277	3.7	17
257	Acoustic multipole sources for the regularized lattice Boltzmann method: Comparison with multiple-relaxation-time models in the inviscid limit. *Physical Review E*, **2017**, 95, 063301	2.4	8
256	Non-classical/Exponential Decay Regimes in Multiscale Generated Isotropic Turbulence **2017**, 421-431		
255	Localization of random acoustic sources in an inhomogeneous medium. *Journal of Sound and Vibration*, **2016**, 384, 75-93	3.9	7
254	A hybrid anchored-ANOVA POD/Kriging method for uncertainty quantification in unsteady high-fidelity CFD simulations. *Journal of Computational Physics*, **2016**, 324, 137-173	4.1	25
253	Pseudo-homogeneous 1D RANS radial model for heat transfer in tubular packed beds. *International Journal of Heat and Fluid Flow*, **2016**, 62, 258-272	2.4	2
252	Decay and growth laws in homogeneous shear turbulence. *Journal of Turbulence*, **2016**, 17, 699-726	2.1	10
251	A compressible lattice Boltzmann finite volume model for high subsonic and transonic flows on regular lattices. *Computers and Fluids*, **2016**, 131, 45-55	2.8	28
250	Riblets Induced Drag Reduction on a Spatially Developing Turbulent Boundary Layer. *ERCOFTAC Series*, **2016**, 213-224	0.1	1
249	Structural stability of Lattice Boltzmann schemes. *Physica A: Statistical Mechanics and Its Applications*, **2016**, 444, 1-8	3.3	3
248	Spectral Assessment of the Turbulent Convection Velocity in a Spatially Developing Flat Plate Turbulent Boundary Layer at Reynolds Number (Re_theta = 13,000). *ERCOFTAC Series*, **2016**, 379-389	0.1	
247	Friction drag reduction achievable by near-wall turbulence manipulation in spatially developing boundary-layer. *Physics of Fluids*, **2016**, 28, 035108	4.4	6
246	A spectral model for homogeneous shear-driven anisotropic turbulence in terms of spherically averaged descriptors. *Journal of Fluid Mechanics*, **2016**, 788, 147-182	3.7	28
245	Reconstruction of unsteady viscous flows using data assimilation schemes. *Journal of Computational Physics*, **2016**, 316, 255-280	4.1	47
244	Exact non local expression for the wall heat transfer coefficient in tubular catalytic reactors. *International Journal of Heat and Fluid Flow*, **2015**, 54, 97-106	2.4	7

243	Riblet Flow Model Based on an Extended FIK Identity. *Flow, Turbulence and Combustion*, **2015**, 95, 351-376	2.5	19
242	A three dimensional lattice model for thermal compressible flow on standard lattices. *Journal of Computational Physics*, **2015**, 303, 514-529	4.1	32
241	Passive scalar decay laws in isotropic turbulence: Prandtl number effects. *Journal of Fluid Mechanics* , **2015**, 784, 274-303	3.7	11
240	Sound source localization in a randomly inhomogeneous medium using matched statistical moment method. *Journal of the Acoustical Society of America*, **2015**, 138, 3896-906	2.2	8
239	Numerical investigation on the partial return to isotropy of freely decaying homogeneous axisymmetric turbulence. *Physics of Fluids*, **2014**, 26, 025110	4.4	14
238	Zonal detached eddy simulation (ZDES) of a spatially developing flat plate turbulent boundary layer over the Reynolds number range 3 150 ? Re? 14 000. *Physics of Fluids*, **2014**, 26, 025116	4.4	34
237	Low Mass-Damping Vortex-Induced Vibrations of a Single Cylinder at Moderate Reynolds Number. *Journal of Pressure Vessel Technology, Transactions of the ASME*, **2014**, 136, 0513051-513057	1.2	3
236	Is isotropic turbulence decay governed by asymptotic behavior of large scales? An eddy-damped quasi-normal Markovian-based data assimilation study. *Physics of Fluids*, **2014**, 26, 115105	4.4	18
235	Wall model for large-eddy simulation based on the lattice Boltzmann method. *Journal of Computational Physics*, **2014**, 275, 25-40	4.1	45
234	An adjoint-based lattice Boltzmann method for noise control problems. *Journal of Computational Physics*, **2014**, 276, 39-61	4.1	10
233	Epistemic uncertainties in RANS model free coefficients. *Computers and Fluids*, **2014**, 102, 315-335	2.8	29
232	An adaptive numerical method for solving EDQNM equations for the analysis of long-time decay of isotropic turbulence. *Journal of Computational Physics*, **2014**, 262, 72-85	4.1	4
231	An Uncertainty Quantification Analysis in a Simplified Problem of Urban Pollutant Dispersion by Means of ANOVA-POD/Kriging-Based Response Surfaces **2014**,		2
230	On the emergence of non-classical decay regimes in multiscale/fractal generated isotropic turbulence. *Journal of Fluid Mechanics*, **2014**, 756, 816-843	3.7	12
229	Analysis of the absorbing layers for the weakly-compressible lattice Boltzmann methods. *Journal of Computational Physics*, **2013**, 245, 14-42	4.1	23
228	Further insights into self-similarity and self-preservation in freely decaying isotropic turbulence. *Journal of Turbulence*, **2013**, 14, 24-53	2.1	41
227	Flow over a flat plate with uniform inlet and incident coherent gusts. *Journal of Fluid Mechanics*, **2013**, 720, 457-485	3.7	24
226	An arbitrary Lagrangian–Eulerian approach for the simulation of immersed moving solids with Lattice Boltzmann Method. *Journal of Computational Physics*, **2013**, 235, 182-198	4.1	22

225	Pressure statistics in self-similar freely decaying isotropic turbulence. *Journal of Fluid Mechanics*, **2013**, 717,	3.7	17
224	Temperature dynamics in decaying isotropic turbulence with Joule heat production. *Journal of Fluid Mechanics*, **2013**, 724, 425-449	3.7	10
223	Localization of aeroacoustic sound sources in viscous flows by a time reversal method. *Journal of Sound and Vibration*, **2013**, 332, 3655-3669	3.9	14
222	Noise source identification with the lattice Boltzmann method. *Journal of the Acoustical Society of America*, **2013**, 133, 1293-305	2.2	10
221	Multiscale and Multiresolution Approaches in Turbulence **2013**,		60
220	Consistent subgrid scale modelling for lattice Boltzmann methods. *Journal of Fluid Mechanics*, **2012** , 700, 514-542	3.7	56
219	On non-self-similar regimes in homogeneous isotropic turbulence decay. *Journal of Fluid Mechanics*, **2012**, 711, 364-393	3.7	38
218	Stochastic response of the laminar flow past a flat plate under uncertain inflow conditions. *International Journal of Computational Fluid Dynamics*, **2012**, 26, 101-117	1.2	16
217	Sensitivity analysis and determination of free relaxation parameters for the weakly-compressible MRT□BM schemes. *Journal of Computational Physics*, **2012**, 231, 7335-7367	4.1	24
216	A lattice Boltzmann method for nonlinear disturbances around an arbitrary base flow. *Journal of Computational Physics*, **2012**, 231, 8070-8082	4.1	11
215	A Rapid Switch from RANS to WMLES for Spatially Developing Boundary Layers. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, **2012**, 147-156	0.3	5
214	Quantification of errors in large-eddy simulations of a spatially evolving mixing layer using polynomial chaos. *Physics of Fluids*, **2012**, 24, 035101	4.4	19
213	On sensitivity of RANS simulations to uncertain turbulent inflow conditions. *Computers and Fluids*, **2012**, 61, 2-5	2.8	17
212	Evaluation of the unsteady RANS capabilities for separated flows control. *Computers and Fluids*, **2012**, 61, 39-45	2.8	13
211	Time reversal method coupled to complex differentiation technique for the aeroacoustic source detection in viscous flow **2012**,		1
210	Spectral approach to finite Reynolds number effects on Kolmogorov□ 4/5 law in isotropic turbulence. *Physics of Fluids*, **2012**, 24, 015107	4.4	43
209	A compressible wall model for large-eddy simulation with application to prediction of aerothermal quantities. *Physics of Fluids*, **2012**, 24, 065103	4.4	35
208	On the eddy-wave crossover and bottleneck effect in He III-B superfluid turbulence. *Physics of Fluids*, **2012**, 24, 115109	4.4	2

207	Large eddy simulation of the flow around single and two side-by-side cylinders at subcritical Reynolds numbers. *Physics of Fluids*, **2011**, 23, 075101	4.4	83
206	Theoretical Prediction of Turbulent Skin Friction on Geometrically Complex Surfaces. *ERCOFTAC Series*, **2011**, 39-49	0.1	
205	Quantification of the effects of uncertainties in turbulent flows through generalized Polynomial Chaos. *Journal of Physics: Conference Series*, **2011**, 318, 042055	0.3	1
204	A stochastic view of isotropic turbulence decay. *Journal of Fluid Mechanics*, **2011**, 668, 351-362	3.7	26
203	A time-reversal lattice Boltzmann method. *Journal of Computational Physics*, **2011**, 230, 8155-8167	4.1	6
202	A dynamic forcing method for unsteady turbulent inflow conditions. *Journal of Computational Physics*, **2011**, 230, 8647-8663	4.1	42
201	Structural Stability of Discontinuous Galerkin Schemes. *Acta Applicandae Mathematicae*, **2011**, 113, 45-56	1.1	2
200	Opposition control with arrayed actuators in the near-wall region of a spatially developing turbulent boundary layer. *International Journal of Heat and Fluid Flow*, **2011**, 32, 621-630	2.4	4
199	Optimal low-dispersion low-dissipation LBM schemes for computational aeroacoustics. *Journal of Computational Physics*, **2011**, 230, 5353-5382	4.1	49
198	Magnetically induced flame flickering. *Proceedings of the Combustion Institute*, **2011**, 33, 1095-1103	5.9	22
197	Evolution analysis of the main mechanisms of the jet/vortex interaction. *International Journal for Numerical Methods in Fluids*, **2011**, 67, 1024-1046	1.9	1
196	Towards an adaptive POD/SVD surrogate model for aeronautic design. *Computers and Fluids*, **2011**, 40, 195-209	2.8	87
195	Effects of base flow uncertainty on Couette flow stability. *Computers and Fluids*, **2011**, 43, 82-89	2.8	6
194	Comparison of some Lie-symmetry-based integrators. *Journal of Computational Physics*, **2011**, 230, 2174-2188	4.1	17
193	Application of Lattice Boltzmann Method to sensitivity analysis via complex differentiation. *Journal of Computational Physics*, **2011**, 230, 5417-5429	4.1	5
192	Analysis of turbulent skin friction generated in flow along a cylinder. *Physics of Fluids*, **2011**, 23, 065106	4.4	10
191	Advanced large-eddy simulation for lattice Boltzmann methods: The approximate deconvolution model. *Physics of Fluids*, **2011**, 23, 105103	4.4	24
190	Spurious caustics of dispersion-relation-preserving schemes. *International Journal of Computer Mathematics*, **2011**, 88, 2625-2636	1.2	2

189	Is the Smagorinsky coefficient sensitive to uncertainty in the form of the energy spectrum?. *Physics of Fluids*, **2011**, 23, 125109	4.4	19
188	Large Eddy Simulation **2010**,		1
187	A coupled time-reversal/complex differentiation method for aeroacoustic sensitivity analysis: towards a source detection procedure. *Journal of Fluid Mechanics*, **2010**, 642, 181-212	3.7	27
186	Comparison of Gradient-Based and Gradient-Enhanced Response-Surface-Based Optimizers. *AIAA Journal*, **2010**, 48, 981-994	2.1	48
185	Eddy damped quasinormal Markovian simulations of superfluid turbulence in helium II. *Physics of Fluids*, **2010**, 22, 125103	4.4	9
184	Coping with Uncertainty in Turbulent Flow Simulations **2010**, 317-344		
183	Using Multiobjective Evolutionary Algorithms and Data-Mining Methods to Optimize Ornithopters' Kinematics. *Journal of Aircraft*, **2010**, 47, 1504-1516	1.6	3
182	NARX Modeling and Adaptive Closed-Loop Control of a Separation by Synthetic Jet in Unsteady RANS computations **2010**,		3
181	On the Control of Turbulent Axisymmetric Separating/Reattaching Flows Using Zonal Detached Eddy Simulation **2010**,		1
180	Flow dynamics past a simplified wing body junction. *Physics of Fluids*, **2010**, 22, 115111	4.4	74
179	Large Eddy Simulation Study of Synthetic Jet Frequency and Amplitude Effects on a Rounded Step Separated Flow **2010**,		7
178	Aerodynamic sound generation by global modes in hot jets. *Journal of Fluid Mechanics*, **2010**, 647, 473-489	3.7	11
177	Toward advanced subgrid models for Lattice-Boltzmann-based Large-eddy simulation: Theoretical formulations. *Computers and Mathematics With Applications*, **2010**, 59, 2194-2199	2.7	53
176	Meshless approach for wall treatment in Large-Eddy Simulation. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 881-889	5.7	8
175	A gPC-based approach to uncertain transonic aerodynamics. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 1091-1099	5.7	37
174	Curvilinear finite-volume schemes using high-order compact interpolation. *Journal of Computational Physics*, **2010**, 229, 5090-5122	4.1	36
173	On the Dynamics of High Reynolds Number Turbulent Axisymmetric and Plane Separating/Reattaching Flows. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, **2010**, 393-400	0.3	
172	Theoretical prediction of turbulent skin friction on geometrically complex surfaces. *Physics of Fluids* , **2009**, 21, 105105	4.4	41

171	Large Eddy Simulation of Impinging Shock Wave/Turbulent Boundary Layer Interaction at M = 2.3. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2009**, 443-456	0.3	
170	On the dynamics of axisymmetric turbulent separating/reattaching flows. *Physics of Fluids*, **2009**, 21, 075103	4.4	57
169	Large Eddy Simulation for Compressible Flows. *Scientific Computation*, **2009**,	0.1	210
168	Quadratic stochastic estimation of far-field acoustic pressure with coherent structure events in a 2D compressible plane mixing layer. *International Journal for Numerical Methods in Fluids*, **2009**, 62, n/a-n/a	1.9	5
167	Structural stability of finite dispersion-relation preserving schemes. *Chaos, Solitons and Fractals*, **2009**, 41, 2193-2199	9.3	2
166	Pressure loss reduction in hydrogen pipelines by surface restructuring. *International Journal of Hydrogen Energy*, **2009**, 34, 8964-8973	6.7	27
165	Comparison between lattice Boltzmann method and Navier-Stokes high order schemes for computational aeroacoustics. *Journal of Computational Physics*, **2009**, 228, 1056-1070	4.1	198
164	Lattice Boltzmann method with selective viscosity filter. *Journal of Computational Physics*, **2009**, 228, 4478-4490	4.1	68
163	A new phase-screen method for electromagnetic wave propagation in turbulent flows using large-eddy simulation. *Journal of Computational Physics*, **2009**, 228, 7729-7741	4.1	2
162	Spurious solitons and structural stability of finite-difference schemes for non-linear wave equations. *Chaos, Solitons and Fractals*, **2009**, 41, 655-660	9.3	3
161	Lattice Boltzmann simulations of impedance tube flows. *Computers and Fluids*, **2009**, 38, 458-465	2.8	4
160	A linear dispersive mechanism for numerical error growth: spurious caustics. *European Journal of Mechanics, B/Fluids*, **2009**, 28, 146-151	2.4	8
159	Large eddy simulation for aerodynamics: status and perspectives. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 2849-60	3	81
158	Contribution of Reynolds stress distribution to the skin friction in compressible turbulent channel flows. *Physical Review E*, **2009**, 79, 035301	2.4	29
157	Trajectory of an optical vortex in atmospheric turbulence. *Physical Review E*, **2009**, 80, 046609	2.4	13
156	Generation of synthetic turbulent inflow data for large eddy simulation of spatially evolving wall-bounded flows. *Physics of Fluids*, **2009**, 21, 045103	4.4	109
155	Compressible Turbulence Dynamics. *Scientific Computation*, **2009**, 41-76	0.1	
154	Coping with Uncertainty in Turbulent Flow Simulations **2009**, 19-30		

153	Building Efficient Response Surfaces of Aerodynamic Functions with Kriging and Cokriging. *AIAA Journal*, **2008**, 46, 498-507	2.1	148
152	Turbulent Drag Reduction Using Sinusoidal Riblets With Triangular Cross-Section **2008**,		16
151	Zonal-Detached-Eddy-Simulation of a Two-Dimensional and Axisymmetric Separating/Reattaching Flow **2008**,		4
150	Sensitivity of two-dimensional spatially developing mixing layers with respect to uncertain inflow conditions. *Physics of Fluids*, **2008**, 20, 077102	4.4	35
149	Sensitivity Analysis and Multiobjective Optimization for LES Numerical Parameters. *Journal of Fluids Engineering, Transactions of the ASME*, **2008**, 130,	2.1	13
148	Inertial consistent subgrid model for large-eddy simulation based on the lattice Boltzmann method. *Physics of Fluids*, **2008**, 20, 035104	4.4	24
147	A study of time correlations in lattice Boltzmann-based large-eddy simulation of isotropic turbulence. *Physics of Fluids*, **2008**, 20, 035105	4.4	36
146	Special Issue of the Turbulence and Interaction TI2006 Conference. *Flow, Turbulence and Combustion*, **2008**, 80, 1-2	2.5	
145	Unstructured Large Eddy Simulation of the passive control of the flow in a weapon bay. *Journal of Fluids and Structures*, **2008**, 24, 1204-1215	3.1	12
144	Numerical simulation of phase separation and a priori two-phase LES filtering. *Computers and Fluids* , **2008**, 37, 898-906	2.8	55
143	Uncertainty Modeling, Error Charts and Improvement of Subgrid Models **2008**, 37-44		1
142	Homogeneous Turbulence Dynamics **2008**,		292
141	An Improvement of Opposition Control at High Reynolds Numbers. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2008**, 243-249	0.3	1
140	Numerical investigation of the tone noise mechanism over laminar airfoils. *Journal of Fluid Mechanics*, **2007**, 591, 155-182	3.7	160
139	Numerical simulation of the compressible mixing layer past an axisymmetric trailing edge. *Journal of Fluid Mechanics*, **2007**, 591, 215-253	3.7	86
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