Vincent Moureau

List of Publications by Year
in descending order

73 papers	2,216 citations	304743 22 h-index	223800 46 g-index
74 all docs	74 docs citations	74 times ranked	1313 citing authors

#	Article	IF	Citations
1	Determination of spatially averaged consumption speed from spherical expanding flame: A new experimental methodology. Combustion and Flame, 2022, 235, 111720.	5.2	2
2	A massively parallel accurate conservative level set algorithm for simulating turbulent atomization on adaptive unstructured grids. Journal of Computational Physics, 2022, 458, 111075.	3.8	10
3	Three-dimensional DEM-CFD simulation of a lab-scale fluidized bed to support the development of two-fluid model approach. International Journal of Multiphase Flow, 2022, 156, 104189.	3.4	13
4	Optimized chemistry for Large Eddy Simulations of wrinkled flames. Proceedings of the Combustion Institute, 2021, 38, 3097-3106.	3.9	4
5	Combustion for aircraft propulsion: Progress in advanced laser-based diagnostics on high-pressure kerosene/air flames produced with low-NOx fuel injection systems. Combustion and Flame, 2021, 224, 273-294.	5.2	16
6	A level-set framework for the wind turbine wake analysis: from high-fidelity unsteady simulations to 1D momentum theory. Journal of Physics: Conference Series, 2021, 1934, 012011.	0.4	0
7	Numerical simulation of boiling on unstructured grids. Journal of Computational Physics, 2021, 432, 110161.	3.8	9
8	Experiments and Simulations of Free-Surface Flow behind a Finite Height Rigid Vertical Cylinder. Fluids, 2021, 6, 367.	1.7	4
9	A massively parallel CFD/DEM approach for reactive gas-solid flows in complex geometries using unstructured meshes. Computers and Fluids, 2020, 198, 104402.	2.5	16
10	Impact of Spray Droplet Distribution on the Performances of a Kerosene Lean/Premixed Injector. Flow, Turbulence and Combustion, 2020, 104, 421-450.	2.6	7
11	Actuator grid method for turbulence generation applied to yawed wind turbines. Journal of Physics: Conference Series, 2020, 1618, 062064.	0.4	0
12	Actuator line method applied to grid turbulence generation for large-Eddy simulations. Journal of Turbulence, 2020, 21, 407-433.	1.4	2
13	A framework to perform highâ€order deconvolution for finiteâ€volume method on simplicial meshes. International Journal for Numerical Methods in Fluids, 2020, 92, 1551-1583.	1.6	6
14	Large Eddy Simulation of a Turbulent Spray Jet Flame Using Filtered Tabulated Chemistry. Journal of Combustion, 2020, 2020, 1-23.	1.0	8
15	Large-Eddy Simulation of the lean-premixed PRECCINSTA burner with wall heat loss. Proceedings of the Combustion Institute, 2019, 37, 5233-5243.	3.9	50
16	High Performance CFD/DEM Approach in Complex Geometries on Unstructured Meshes. ERCOFTAC Series, 2019, , 193-199.	0.1	0
17	Time Stable Reduced Order Modeling by an Enhanced Reduced Order Basis of the Turbulent and Incompressible 3D Navierâ€“Stokes Equations. Mathematical and Computational Applications, 2019, 24, 45.	1.3	13
18	DEM/CFD Simulations of a Pseudo-2D Fluidized Bed: Comparison with Experiments. Fluids, 2019, 4, 51.	1.7	6

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19	Filtered Wrinkled Flamelets model for Large-Eddy Simulation of turbulent premixed combustion. Combustion and Flame, 2019, 205, 93-108.	5.2	14
20	Large Eddy simulation of a spray jet flame using filtered tabulated chemistry. , 2019, , .		0
21	Modeling of Convective and Conductive Conjugate Heat Transfer in a Kerosene/Air Spray Flame Used for Aeronautical Fire Resistance Tests. ERCOFTAC Series, 2019, , 261-266.	0.1	0
22	Scalable Work-Stealing Load-Balancer for HPC Distributed Memory Systems. Lecture Notes in Computer Science, 2019, , 146-158.	1.3	0
23	Flow Around Thick Airfoils at Very High Reynolds Number. Stall and Dynamic Stall Applications. ERCOFTAC Series, 2019, , 359-365.	0.1	1
24	Large-Eddy Simulation of wind turbines wakes including geometrical effects. Computers and Fluids, 2018, 173, 133-139.	2.5	40
25	LES study of an n-heptane/air turbulent spray jet flame. , 2018, , .		2
26	Geometrical Reduced Order Modeling (ROM) by Proper Orthogonal Decomposition (POD) for the incompressible Navier Stokes equations. , 2018, , .		4
27	Wall-Modeled Large Eddy Simulation of Flow around Oscillating Wind Turbines Dedicated Airfoils. , 2018, , .		0
28	Adaptive multi-resolution Large-Eddy Simulation with control of modeling and numerical errors. , 2018, , .		0
29	Analysis of the Interactions of the Precessing Vortex Core with a Spray Flame in a Swirl Burner. ERCOFTAC Series, 2018, , 407-413.	0.1	0
30	Comparison of Various CFD Codes for LES Simulations of Turbomachinery: From Inviscid Vortex Convection to Multi-Stage Compressor. , 2018, , .		3
31	Integration of Helicopter Annular Combustion Chamber Rig in Propulsion Systems Course for Graduate Students. , 2018, , .		0
32	Modeling of Conjugate Heat Transfer in a Kerosene/Air Spray Flame used for Aeronautical Fire Resistance Tests. Flow, Turbulence and Combustion, 2018, 101, 579-602.	2.6	8
33	About the numerical robustness of biomedical benchmark cases: Interlaboratory FDA's idealized medical device. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02789.	2.1	32
34	LES modeling of piloted jet flames with inhomogeneous inlets using tabulated chemistry methods. , 2017, , .		5
35	Large-Eddy Simulation of a hydrogen enriched methane/air meso-scale combustor. International Journal of Hydrogen Energy, 2017, 42, 2397-2410.	7.1	13
36	Stable POD-Galerkin Reduced Order Models for unsteady turbulent incompressible flows. , 2017, , .		7

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37	Pre-exascale Architectures: OpenPOWER Performance and Usability Assessment for French Scientific Community. Lecture Notes in Computer Science, 2017, , 309-324.	1.3	1
38	A multi-grid framework for the extraction of large-scale vortices in Large-Eddy Simulation. Journal of Computational Physics, 2017, 349, 528-560.	3.8	3
39	Formalism for spatially averaged consumption speed considering spherically expanding flame configuration. Combustion and Flame, 2016, 173, 235-244.	5.2	11
40	Mesh adaptation for largeâ€eddy simulations in complex geometries. International Journal for Numerical Methods in Fluids, 2016, 81, 719-740.	1.6	63
41	Design of implicit high-order filters on unstructured grids for the identification of large-scale features in large-eddy simulation and application to a swirl burner. Physics of Fluids, 2015, 27, .	4.0	21
42	LES of turbulent combustion: On the consistency between flame and flow filter scales. Proceedings of the Combustion Institute, 2015, 35, 1359-1366.	3.9	20
43	A Priori Analysis of Dynamic Models for Large Eddy Simulations of Turbulent Premixed Combustion. ERCOFTAC Series, 2015, , 497-502.	0.1	1
44	Analysis of dynamic models for large eddy simulations of turbulent premixed combustion. Combustion and Flame, 2015, 162, 4622-4642.	5.2	39
45	Numerical study of a flapping liquid sheet sheared by a high-speed stream. International Journal of Multiphase Flow, 2015, 77, 196-208.	3.4	21
46	YALES2BIO: A Computational Fluid Dynamics Software Dedicated to the Prediction of Blood Flows in Biomedical Devices. IFMBE Proceedings, 2015, , 7-10.	0.3	5
47	Design of High-Order Implicit Filters on Unstructured Grids for the Identification of Large-Scale Features in Large-Eddy Simulations. ERCOFTAC Series, 2015, , 81-87.	0.1	1
48	Large-Eddy Simulation of Flow and Heat Transfer Around a Low-Mach Number Turbine Blade. ERCOFTAC Series, 2015, , 361-366.	0.1	1
49	A filtered-laminar-flame PDF sub-grid-scale closure for LES of premixed turbulent flames: II. Application to a stratified bluff-body burner. Combustion and Flame, 2014, 161, 1775-1791.	5.2	48
50	Modelling nitrogen oxide emissions in turbulent flames with air dilution: Application to LES of a non-premixed jet-flame. Combustion and Flame, 2014, 161, 496-509.	5.2	20
51	Large-Eddy Simulation and Conjugate Heat Transfer Around a Low-Mach Turbine Blade. Journal of Turbomachinery, 2014, 136, .	1.7	44
52	LES Modeling of the Impact of Heat Losses and Differential Diffusion on Turbulent Stratified Flame Propagation: Application to the TU Darmstadt Stratified Flame. Flow, Turbulence and Combustion, 2014, 93, 349-381.	2.6	27
53	A filtered-laminar-flame PDF sub-grid scale closure for LES of premixed turbulent flames. Part I: Formalism and application to a bluff-body burner with differential diffusion. Combustion and Flame, 2014, 161, 1756-1774.	5.2	60
54	Optimization of the deflated Conjugate Gradient algorithm for the solving of elliptic equations on massively parallel machines. Journal of Computational Physics, 2013, 238, 32-47.	3.8	59

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55	Compressible and low Mach number LES of a swirl experimental burner. Comptes Rendus - Mecanique, 2013, 341, 277-287.	2.1	5
56	Large-Eddy Simulation and Conjugate Heat Transfer Around a Low-Mach Turbine Blade. , 2013, , .		2
57	A massively parallel solution strategy for efficient thermal radiation simulation. Journal of Physics: Conference Series, 2012, 369, 012017.	0.4	2
58	Large-Eddy Simulations of flow and heat transfer around a low-Mach number turbine blade. , 2012, , .		11
59	Modeling differential diffusion in Large Eddy Simulation of a bluff body stabilized premixed weakly-turbulent flame. , 2012, , .		0
60	Optimization of the Deflated Conjugate Gradients algorithm applied to the massively parallel LES of heat transfer in gas turbines. , 2012, , .		0
61	Composition-space premixed flamelet solution with differential diffusion for in situ flamelet-generated manifolds. Combustion and Flame, 2011, 158, 2009-2016.	5.2	39
62	From Large-Eddy Simulation to Direct Numerical Simulation of a lean premixed swirl flame: Filtered laminar flame-PDF modeling. Combustion and Flame, 2011, 158, 1340-1357.	5.2	205
63	Design of a massively parallel CFD code for complex geometries. Comptes Rendus - Mecanique, 2011, 339, 141-148.	2.1	168
64	Development and assessment of a coupled strategy for conjugate heat transfer with Large Eddy Simulation: Application to a cooled turbine blade. International Journal of Heat and Fluid Flow, 2009, 30, 1129-1141.	2.4	111
65	Evaluation of numerical strategies for large eddy simulation of particulate two-phase recirculating flows. Journal of Computational Physics, 2009, 228, 539-564.	3.8	76
66	A level set formulation for premixed combustion LES considering the turbulent flame structure. Combustion and Flame, 2009, 156, 801-812.	5.2	80
67	Massively parallel LES of azimuthal thermo-acoustic instabilities in annular gas turbines. Comptes Rendus - Mecanique, 2009, 337, 385-394.	2.1	65
68	Conjugate heat transfer with Large Eddy Simulation for gas turbine components. Comptes Rendus - Mecanique, 2009, 337, 550-561.	2.1	28
69	An accurate conservative level set/ghost fluid method for simulating turbulent atomization. Journal of Computational Physics, 2008, 227, 8395-8416.	3.8	327
70	A ghost-fluid method for large-eddy simulations of premixed combustion in complex geometries. Journal of Computational Physics, 2007, 221, 600-614.	3.8	42
71	An efficient semi-implicit compressible solver for large-eddy simulations. Journal of Computational Physics, 2007, 226, 1256-1270.	3.8	65
72	Numerical methods for unsteady compressible multi-component reacting flows on fixed and moving grids. Journal of Computational Physics, 2005, 202, 710-736.	3.8	218

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73	Towards Large Eddy Simulation in Internal-Combustion Engines: Simulation of a Compressed Tumble Flow. , 0, , .		32