

# L Y M Gicquel

## List of Publications by Year in descending order

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141  
papers

3,579  
citations

136950

32  
h-index

149698

56  
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141  
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141  
docs citations

141  
times ranked

1626  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Eddy Simulations of gaseous flames in gas turbine combustion chambers. <i>Progress in Energy and Combustion Science</i> , 2012, 38, 782-817.	31.2	373
2	Large Eddy Simulation of combustion instabilities in a lean partially premixed swirled flame. <i>Combustion and Flame</i> , 2012, 159, 621-637.	5.2	274
3	Acoustic and Large Eddy Simulation studies of azimuthal modes in annular combustion chambers. <i>Combustion and Flame</i> , 2012, 159, 3398-3413.	5.2	184
4	Velocity filtered density function for large eddy simulation of turbulent flows. <i>Physics of Fluids</i> , 2002, 14, 1196-1213.	4.0	158
5	Investigation of Two-Fluid Methods for Large Eddy Simulation of Spray Combustion in Gas Turbines. <i>Flow, Turbulence and Combustion</i> , 2008, 80, 291-321.	2.6	92
6	Effects of mesh resolution on large eddy simulation of reacting flows in complex geometry combustors. <i>Combustion and Flame</i> , 2008, 155, 196-214.	5.2	92
7	Using LES to Study Reacting Flows and Instabilities in Annular Combustion Chambers. <i>Flow, Turbulence and Combustion</i> , 2012, 88, 191-206.	2.6	88
8	LES of longitudinal and transverse self-excited combustion instabilities in a bluff-body stabilized turbulent premixed flame. <i>Combustion and Flame</i> , 2015, 162, 4075-4083.	5.2	88
9	Comparison of Nonreflecting Outlet Boundary Conditions for Compressible Solvers on Unstructured Grids. <i>AIAA Journal</i> , 2010, 48, 2348-2364.	2.6	85
10	Acoustically perturbed turbulent premixed swirling flames. <i>Physics of Fluids</i> , 2011, 23, .	4.0	83
11	Large Eddy Simulation of Stable Supersonic Jet Impinging on Flat Plate. <i>AIAA Journal</i> , 2010, 48, 2325-2338.	2.6	79
12	An overset grid method for large eddy simulation of turbomachinery stages. <i>Journal of Computational Physics</i> , 2014, 274, 333-355.	3.8	69
13	Massively parallel LES of azimuthal thermo-acoustic instabilities in annular gas turbines. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 385-394.	2.1	65
14	Large eddy simulation of mean and oscillating flow in a side-dump ramjet combustor. <i>Combustion and Flame</i> , 2008, 152, 154-176.	5.2	62
15	Flame propagation in aeronautical swirled multi-burners: Experimental and numerical investigation. <i>Combustion and Flame</i> , 2014, 161, 2387-2405.	5.2	62
16	Effects of free-stream turbulence on high pressure turbine blade heat transfer predicted by structured and unstructured LES. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 5754-5768.	4.8	61
17	System identification of a large-scale swirled partially premixed combustor using LES and measurements. <i>Journal of Turbulence</i> , 2005, 6, N21.	1.4	58
18	High performance parallel computing of flows in complex geometries: I. Methods. <i>Computational Science &amp; Discovery</i> , 2009, 2, 015003.	1.5	57

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19	Bistable swirled flames and influence on flame transfer functions. <i>Combustion and Flame</i> , 2014, 161, 184-196.	5.2	57
20	Large eddy simulation of flows in industrial compressors: a path from 2015 to 2035. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130323.	3.4	54
21	Using LES to predict ignition sequences and ignition probability of turbulent two-phase flames. <i>Combustion and Flame</i> , 2013, 160, 1191-1207.	5.2	48
22	Analysis of high performance conjugate heat transfer with the OpenPALM coupler. <i>Computational Science &amp; Discovery</i> , 2015, 8, 015003.	1.5	47
23	Large Eddy Simulation of Supersonic Impinging Jets. <i>AIAA Journal</i> , 2012, 50, 1560-1574.	2.6	45
24	Influence of chemical schemes, numerical method and dynamic turbulent combustion modeling on LES of premixed turbulent flames. <i>Combustion and Flame</i> , 2018, 191, 417-430.	5.2	45
25	RANS and LES for the Heat Transfer Prediction in Turbine Guide Vane. <i>Journal of Propulsion and Power</i> , 2012, 28, 423-433.	2.2	44
26	Computational-Fluid-Dynamics-Based Kriging Optimization Tool for Aeronautical Combustion Chambers. <i>AIAA Journal</i> , 2009, 47, 631-645.	2.6	38
27	Combining LES of combustion chamber and an actuator disk theory to predict combustion noise in a helicopter engine. <i>Combustion and Flame</i> , 2016, 165, 272-287.	5.2	37
28	Secondary peak in the Nusselt number distribution of impinging jet flows: A phenomenological analysis. <i>Physics of Fluids</i> , 2016, 28, .	4.0	36
29	Effects of liquid fuel/wall interaction on thermoacoustic instabilities in swirling spray flames. <i>Combustion and Flame</i> , 2020, 219, 86-101.	5.2	36
30	LES Study of Transverse Acoustic Instabilities in a Swirled Kerosene/Air Combustion Chamber. <i>Flow, Turbulence and Combustion</i> , 2016, 96, 207-226.	2.6	35
31	Stabilization mechanisms of CH <sub>4</sub> premixed swirled flame enriched with a non-premixed hydrogen injection. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 6355-6363.	3.9	33
32	Large eddy simulation predictions of mixing enhancement for jets in cross-flows. <i>Journal of Turbulence</i> , 2004, 5, .	1.4	32
33	Massively parallel conjugate heat transfer methods relying on large eddy simulation applied to an aeronautical combustor. <i>Computational Science &amp; Discovery</i> , 2013, 6, 015008.	1.5	32
34	Conjugate heat transfer of a rib-roughened internal turbine blade cooling channel using large eddy simulation. <i>International Journal of Heat and Fluid Flow</i> , 2016, 61, 650-664.	2.4	30
35	Eulerian and Lagrangian Large-Eddy Simulations of an evaporating two-phase flow. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 458-468.	2.1	28
36	On the sensitivity of a helicopter combustor wall temperature to convective and radiative thermal loads. <i>Applied Thermal Engineering</i> , 2016, 103, 1450-1459.	6.0	28

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37	A characteristic inlet boundary condition for compressible, turbulent, multispecies turbomachinery flows. <i>Computers and Fluids</i> , 2019, 178, 41-55.	2.5	28
38	Development of an Engine Representative Combustor Simulator Dedicated to Hot Streak Generation. <i>Journal of Turbomachinery</i> , 2014, 136, .	1.7	27
39	Impact of wall heat transfer in Large Eddy Simulation of flame dynamics in a swirled combustion chamber. <i>Combustion and Flame</i> , 2021, 234, 111728.	5.2	27
40	Steady/Unsteady Reynolds-Averaged Navier–Stokes and Large Eddy Simulations of a Turbine Blade at High Subsonic Outlet Mach Number. <i>Journal of Turbomachinery</i> , 2015, 137, .	1.7	25
41	Assessment of the Indirect Combustion Noise Generated in a Transonic High-Pressure Turbine Stage. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	1.1	23
42	Experimental and Numerical Studies of Dilution Systems for Low-Emission Combustors. <i>AIAA Journal</i> , 2005, 43, 1753-1766.	2.6	22
43	High performance parallel computing of flows in complex geometries: II. Applications. <i>Computational Science &amp; Discovery</i> , 2009, 2, 015004.	1.5	22
44	Development of an algebraic-closure-based moment method for unsteady Eulerian simulations of particle-laden turbulent flows in very dilute regime. <i>International Journal of Multiphase Flow</i> , 2014, 58, 257-278.	3.4	21
45	Analysis of unsteady reacting flows and impact of chemistry description in Large Eddy Simulations of side-dump ramjet combustors. <i>Combustion and Flame</i> , 2010, 157, 176-191.	5.2	20
46	Compatibility of Characteristic Boundary Conditions with Radial Equilibrium in Turbomachinery Simulations. <i>AIAA Journal</i> , 2014, 52, 2829-2839.	2.6	20
47	On the importance of inlet boundary conditions for aerothermal predictions of turbine stages with large eddy simulation. <i>Computers and Fluids</i> , 2017, 154, 60-73.	2.5	20
48	Combining analytical models and LES data to determine the transfer function from swirled premixed flames. <i>Combustion and Flame</i> , 2020, 217, 222-236.	5.2	20
49	Noise mechanisms in a transonic high-pressure turbine stage. <i>International Journal of Aeroacoustics</i> , 2016, 15, 144-161.	1.3	17
50	On the impact of $H_2$ enrichment on flame structure and combustion dynamics of a lean partially-premixed turbulent swirling flame. <i>Combustion and Flame</i> , 2022, 241, 112120.	5.2	17
51	Large-Eddy-Simulation Modeling for Aerothermal Predictions Behind a Jet In Crossflow. <i>AIAA Journal</i> , 2007, 45, 2438-2447.	2.6	16
52	Chemical kinetics modeling and LES combustion model effects on a perfectly premixed burner. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 318-328.	2.1	16
53	On the impact of fuel injection angle in Euler–Lagrange large eddy simulations of swirling spray flames exhibiting thermoacoustic instabilities. <i>Combustion and Flame</i> , 2021, 227, 359-370.	5.2	16
54	Large Eddy Simulations of the Combustor Turbine Interface: Study of the Potential and Clocking Effects. , 2016, , .		15

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55	Effects of Subgrid Scale Modeling on the Deterministic and Stochastic Turbulent Energetic Distribution in Large-Eddy Simulations of a High-Pressure Turbine Stage. Journal of Turbomachinery, 2016, 138, .	1.7	15
56	Large Eddy Simulation of Rotating Ribbed Channel. , 2013, , .		14
57	Advanced Combustor Exit Plane Temperature Diagnostics Based on Large Eddy Simulations. Flow, Turbulence and Combustion, 2015, 95, 79-96.	2.6	14
58	Experimental and Numerical Analysis of an Ignition Sequence in a Multiple-Injectors Burner. , 2013, , .		13
59	Numerical analysis of a high-order unstructured overset grid method for compressible LES of turbomachinery. Journal of Computational Physics, 2018, 363, 371-398.	3.8	13
60	The three-dimensional flow field and heat transfer in a rib-roughened channel at large rotation numbers. International Journal of Heat and Mass Transfer, 2018, 123, 848-866.	4.8	13
61	Experimental and Numerical Calculation of Turbulent Timescales at the Exit of an Engine Representative Combustor Simulator. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	12
62	Analysis of the effect of intermittency in a high-pressure turbine blade. Physics of Fluids, 2020, 32, .	4.0	12
63	Comparison of numerical methods and combustion models for LES of a ramjet. Comptes Rendus - Mecanique, 2009, 337, 352-361.	2.1	11
64	Towards Massively Parallel Large Eddy Simulation of Turbine Stages. , 2013, , .		11
65	Large-Eddy Simulation and Conjugate Heat Transfer in a Round Impinging Jet. , 2014, , .		11
66	LES of bifurcation and hysteresis in confined annular swirling flows. Computers and Fluids, 2014, 89, 167-178.	2.5	11
67	Bluff-body Thermal Property and Initial State Effects on a Laminar Premixed Flame Anchoring Pattern. Flow, Turbulence and Combustion, 2018, 100, 561-591.	2.6	11
68	Static mesh adaptation for reliable large eddy simulation of turbulent reacting flows. Physics of Fluids, 2021, 33, .	4.0	11
69	Experimental Investigation of the Jets in Crossflow: Nonswirling Flow Case. AIAA Journal, 2009, 47, 1079-1089.	2.6	10
70	Large eddy simulations and global stability analyses of an annular and cylindrical rotor/stator cavity limit cycles. Physics of Fluids, 2019, 31, .	4.0	10
71	LES of the LS89 cascade: influence of inflow turbulence on the flow predictions. , 2017, , .		10
72	Numerical and Physical Instabilities in Massively Parallel LES of Reacting Flows. Journal of Scientific Computing, 2011, 49, 78-93.	2.3	9

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73	A Thickened-Hole Model for Large Eddy Simulations over Multiperforated Liners. Flow, Turbulence and Combustion, 2018, 101, 705-717.	2.6	9
74	Dynamics of spray and swirling flame under acoustic oscillations : A joint experimental and LES investigation. Proceedings of the Combustion Institute, 2021, 38, 6015-6024.	3.9	9
75	Stochastic forcing for sub-grid scale models in wall-modeled large-eddy simulation. Physics of Fluids, 2021, 33, .	4.0	9
76	Large-Eddy Simulation of the Flow Developing in Static and Rotating Ribbed Channels. Journal of Turbomachinery, 2020, 142, .	1.7	9
77	Advanced Numerical Simulation Dedicated to the Prediction of Heat Transfer in a Highly Loaded Turbine Guide Vane. , 2010, , .		8
78	LES to Ease Understanding of Complex Unsteady Combustion Features of Ramjet Burners. Flow, Turbulence and Combustion, 2011, 87, 449-472.	2.6	8
79	Large Eddy Simulation of a High Pressure Turbine Stage: Effects of Sub-Grid Scale Modeling and Mesh Resolution. , 2014, , .		8
80	Application of an Overset Grid Method to the Large Eddy Simulation of a High-Speed Multistage Axial Compressor. , 2016, , .		8
81	Large-Eddy-simulation prediction of indirect combustion noise in the entropy wave generator experiment. International Journal of Spray and Combustion Dynamics, 2018, 10, 154-168.	1.0	8
82	Dynamic mode tracking and control with a relaxation method. Physics of Fluids, 2019, 31, .	4.0	8
83	Large scale motions of multiple limit-cycle high Reynolds number annular and toroidal rotor/stator cavities. Physics of Fluids, 2017, 29, .	4.0	7
84	Resampling strategies to improve surrogate model-based uncertainty quantification: Application to LES of LS89. International Journal for Numerical Methods in Fluids, 2018, 87, 607-627.	1.6	7
85	Investigation of the concave curvature effect for an impinging jet flow. Physical Review Fluids, 2017, 2, .	2.5	7
86	Large-eddy-simulation-based analysis of Reynolds-stress budgets for a round impinging jet. Physics of Fluids, 2021, 33, .	4.0	7
87	Large eddy simulations of turbulent reacting flows in real burners: the status and challenges. Journal of Physics: Conference Series, 2008, 125, 012029.	0.4	6
88	Analysis of the Unsteady Flow Field Inside a Fan-Shaped Cooling Hole Predicted by Large Eddy Simulation. Journal of Turbomachinery, 2021, 143, .	1.7	6
89	Towards the Large-Eddy Simulation of a full engine: Integration of a 360 azimuthal degrees fan, compressor and combustion chamber. Part I: Methodology and initialisation. Journal of the Global Power and Propulsion Society, 2021, , 1-16.	0.8	6
90	Steady/Unsteady Reynolds Averaged Navier-Stokes and Large Eddy Simulations of a Turbine Blade at High Subsonic Outlet Mach Number. , 2010, , .		5

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91	Integrated Large Eddy Simulation of Combustor and Turbine Interactions: Effect of Turbine Stage Inlet Condition. , 2017, , .		5
92	Large Eddy Simulations of Static and Rotating Ribbed Channels in Adiabatic and Isothermal Conditions. , 2017, , .		5
93	A mesh adaptation strategy for complex wall-modeled turbomachinery LES. Computers and Fluids, 2021, 214, 104766.	2.5	5
94	Towards the Large-Eddy Simulation of a full engine: Integration of a 360 azimuthal degrees fan, compressor and combustion chamber. Part II: Comparison against stand-alone simulations. Journal of the Global Power and Propulsion Society, 2021, , 1-16.	0.8	5
95	Global spectral analysis of the Lax-Wendroff-central difference scheme applied to Convection-Diffusion equation. Computers and Fluids, 2022, 242, 105508.	2.5	5
96	Mesh Dependency of Turbulent Reacting Large-Eddy Simulations of a Gas Turbine Combustion Chamber. ERCOFTAC Series, 2008, , 319-330.	0.1	4
97	Multiphase Flow LES Study of the Fuel Split Effects on Combustion Instabilities in an Ultra Low-NOx Annular Combustor. , 2015, , .		4
98	Acoustic Analysis of a Liquid Fuel Swirl Combustor Using Dynamic Mode Decomposition. , 2015, , .		4
99	Numerical investigation of combustion noise: The Entropy Wave Generator. , 2016, , .		4
100	Evaluation of Integral Turbulence Scale Through the Fan Stage of a Turbofan Using Hot Wire Anemometry and Large Eddy Simulation. , 2018, , .		4
101	Highly Parallel Large Eddy Simulations of Multiburner Configurations in Industrial Gas Turbines. , 2007, , 325-336.		4
102	Large Eddy Simulation of Heat Transfer Within a Multi-Perforation Synthetic Jets Configuration. Journal of Turbomachinery, 2020, 142, .	1.7	4
103	Analysis of a high-pressure multistage axial compressor at off-design conditions with coarse Large Eddy Simulations. , 2017, , .		4
104	Unsteady Analysis of Heat Transfer Coefficient Distribution in a Static Ribbed Channel for An Established Flow. Journal of Turbomachinery, 2021, 143, .	1.7	4
105	Massively parallel LES of azimuthal thermo-acoustic instabilities in annular gas turbines. Journal of Physics: Conference Series, 2009, 180, 012035.	0.4	3
106	Application of RANS and LES to the Prediction of Flows in High Pressure Turbine Components. , 2011, , .		3
107	Steady and Unsteady Modeling for Heat Transfer Predictions of High Pressure Turbine Blade Internal Cooling. , 2012, , .		3
108	Aerothermal Prediction of an Aeronautical Combustion Chamber Based on the Coupling of Large Eddy Simulation, Solid Conduction and Radiation Solvers. , 2015, , .		3

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109	Experimental and Numerical Calculation of Turbulent Timescales at the Exit of an Engine Representative Combustor Simulator. , 2015, , .		3
110	Multiphase Flow Large-Eddy Simulation Study of the Fuel Split Effects on Combustion Instabilities in an Ultra-Low-NOx Annular Combustor. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	3
111	Comparison of Heterogeneous and Homogeneous Coolant Injection Models for Large Eddy Simulation of Multiperforated Liners Present in a Combustion Simulator. , 2017, , .		3
112	Study of Combustion Noise Generation in a Realistic Turbine Stage Configuration. , 2018, , .		3
113	Large Eddy Simulations of a Highly Loaded Transonic Blade With Separated Flow. , 2018, , .		3
114	Large Eddy Simulation of the Flow Developing in Static and Rotating Ribbed Channels. , 2019, , .		3
115	Generation of Realistic Boundary Conditions at the Combustion Chamber/Turbine Interface Using Large-Eddy Simulation. Energies, 2021, 14, 8206.	3.1	3
116	LES and Acoustic Analysis of Turbulent Reacting Flows: Application to a 3D Oscillatory Remjet Combustor. , 2006, , .		2
117	LES Evaluation of Non-Linear Effects on the Dynamic Flame Response in a Real Gas Turbine Combustion Chamber. , 2013, , .		2
118	LES of a Round Impinging Jet: Investigation of the Link Between Nusselt Secondary Peak and Near-Wall Vortical Structures. , 2016, , .		2
119	Unsteady Macro-Structures from Large-Eddy Simulation of Industrial Turbopump Turbine Cavity. AIAA Journal, 2017, 55, 2198-2214.	2.6	2
120	Sensitivity of Large Eddy Simulations to Inflow Condition and Modeling if Applied to a Transonic High-Pressure Cascade Vane. , 2017, , .		2
121	Characterization of the Surface Curvature Effect Using LES for a Single Round Impinging Jet. , 2017, , .		2
122	Assessment of a Coolant Injection Model on Cooled High-Pressure Vanes with Large-Eddy Simulation. Flow, Turbulence and Combustion, 2020, 104, 643-672.	2.6	2
123	Wall-Modeled Large-Eddy Simulations of a Multistage High-Pressure Compressor. Flow, Turbulence and Combustion, 2020, 104, 725-751.	2.6	2
124	Stability and control of an annular rotor/stator cavity limit cycle. Physics of Fluids, 2020, 32, .	4.0	2
125	Large Eddy Simulation of Combustion on Massively Parallel Machines. Lecture Notes in Computer Science, 2008, , 444-464.	1.3	2
126	Large Eddy Simulation of a Two-Phase Reacting Flow in an Experimental Burner. ERCOFTAC Series, 2010, , 345-351.	0.1	2



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127	Grid Effects on LES Thermo-Acoustic Limit-Cycle of a Full Annular Aeronautical Engine. ERCOFTAC Series, 2011, , 231-240.	0.1	2
128	Multiscale and Multiresolution Approaches in Turbulence, LES, DES and Hybrid RANS/LES Methods: Applications and Guidelines. AIAA Journal, 2014, 52, 1342-1343.	2.6	1
129	Local and Global Stability Analysis of an Academic Rotor/Stator Cavity. , 2018, , .		1
130	On the Use of Periodic Boundary Condition for Large Eddy Simulation of Trailing Edge Cutback Film Cooling With Internal Ribs. , 2018, , .		1
131	Large Eddy Simulations in a Transonic Centrifugal Compressor. , 2018, , .		1
132	Partitioned High Performance Code Coupling Applied to CFD. Lecture Notes in Computer Science, 2017, , 3-12.	1.3	1
133	Inlet and Outlet Characteristics Boundary Conditions for Large Eddy Simulations of Turbomachinery. , 2019, , .		1
134	Large-Eddy Simulations of Heat Transfer Within a Multi-Perforation Synthetic Jets Configuration. , 2019, , .		1
135	Large Eddy Simulation of Combustor and Complete Single-Stage High-Pressure Turbine of the FACTOR Test Rig. , 2019, , .		1
136	Prediction of the Ignition Phases in Aeronautical and Laboratory Burners using Large Eddy Simulations. , 2009, , .		0
137	Development of an Engine Representative Combustor Simulator Dedicated to Hot Streak Generation. , 2014, , .		0
138	Multiscale and Multiresolution Approaches in Turbulence. AIAA Journal, 2015, 53, 511-511.	2.6	0
139	Variations of Anchoring Pattern of a Bluff-Body Stabilized Laminar Premixed Flame as a Function of the Wall Temperature. , 2016, , .		0
140	Advanced Statistical Analysis Estimating the Heat Load Issued by Hot Streaks and Turbulence on a High-Pressure Vane in the Context of Adiabatic Large Eddy Simulations. , 2017, , .		0
141	Control Strategies of an Academic Rotor/Stator Cavity Through Sensitivity Analysis. , 2019, , .		0