# Luc Vervisch

List of Publications by Year
in descending order

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|---|---|---|---|
| 172 papers | 7,101 citations | 70961 41 h-index | 62479 80 g-index |
| 185 all docs | 185 docs citations | 185 times ranked | 2299 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Turbulent combustion modeling. Progress in Energy and Combustion Science, 2002, 28, 193-266. | 15.8 | 781 |
| 2 | Effects of heat release on triple flames. Physics of Fluids, 1995, 7, 1447-1454. | 1.6 | 386 |
| 3 | Large-eddy simulation of a lifted methane jet flame in a vitiated coflow. Combustion and Flame, 2008, 152, 415-432. | 2.8 | 262 |
| 4 | Three-dimensional boundary conditions for direct and large-eddy simulation of compressible viscous flows. Journal of Computational Physics, 2008, 227, 5105-5143. | 1.9 | 229 |
| 5 | DIRECT NUMERICAL SIMULATION OF NON-PREMIXED TURBULENT FLAMES. Annual Review of Fluid Mechanics, 1998, 30, 655-691. | 10.8 | 215 |
| 6 | Approximating the chemical structure of partially premixed and diffusion counterflow flames using FPI flamelet tabulation. Combustion and Flame, 2005, 140, 147-160. | 2.8 | 213 |
| 7 | 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. | 2.8 | 205 |
| 8 | Multidimensional flamelet-generated manifolds for partially premixed combustion. Combustion and Flame, 2010, 157, 43-61. | 2.8 | 200 |
| 9 | Design of a massively parallel CFD code for complex geometries. Comptes Rendus - Mecanique, 2011, 339, 141-148. | 2.1 | 168 |
| 10 | Analysis of weakly turbulent dilute-spray flames and spray combustion regimes. Journal of Fluid Mechanics, 2005, 537, 317. | 1.4 | 165 |
| 11 | DNS of a premixed turbulent V flame and LES of a ducted flame using a FSD-PDF subgrid scale closure with FPI-tabulated chemistry. Combustion and Flame, 2005, 143, 566-586. | 2.8 | 161 |
| 12 | Spray vaporization in nonpremixed turbulent combustion modeling: a single droplet model. Combustion and Flame, 2000, 121, 75-90. | 2.8 | 156 |
| 13 | DNS analysis of partially premixed combustion in spray and gaseous turbulent flame-bases stabilized in hot air. Combustion and Flame, 2005, 140, 172-195. | 2.8 | 152 |
| 14 | Large-eddy simulation of a fuel-lean premixed turbulent swirl-burner. Combustion and Flame, 2008, 155, 247-266. | 2.8 | 144 |
| 15 | Surface density function in premixed turbulent combustion modeling, similarities between probability density function and flame surface approaches. Physics of Fluids, 1995, 7, 2496-2503. | 1.6 | 140 |
| 16 | Partially premixed flamelets in LES of nonpremixed turbulent combustion. Combustion Theory and Modelling, 2002, 6, 529-551. | 1.0 | 139 |
| 17 | Role of the progress variable in models for partially premixed turbulent combustion. Combustion and Flame, 2005, 141, 431-437. | 2.8 | 134 |
| 18 | Modeling subgrid scale mixture fraction variance in LES of evaporating spray. Combustion and Flame, 2006, 146, 635-648. | 2.8 | 110 |

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| 19 | Premixed turbulent combustion modeling using tabulated detailed chemistry and PDF. Proceedings of the Combustion Institute, 2005, 30, 867-874. | 2.4 | 105 |
| 20 | Triple flames and partially premixed combustion in autoignition of non-premixed turbulent mixtures. Proceedings of the Combustion Institute, 1996, 26, 233-240. | 0.3 | 101 |
| 21 | Edge flames and partially premixed combustion in diffusion flame quenching. Combustion and Flame, 2001, 125, 788-803. | 2.8 | 84 |
| 22 | Three facets of turbulent combustion modelling: DNS of premixed V-flame, LES of lifted nonpremixed flame and RANS of jet-flame. Journal of Turbulence, 2004, 5, . | 0.5 | 84 |
| 23 | Theoretical and numerical study of a symmetrical triple flame using the parabolic flame path approximation. Journal of Fluid Mechanics, 2000, 415, 227-260. | 1.4 | 80 |
| 24 | Large eddy simulation of forced ignition of an annular bluff-body burner. Combustion and Flame, 2010, 157, 579-601. | 2.8 | 74 |
| 25 | An optimization-based approach to detailed chemistry tabulation: Automated progress variable definition. Combustion and Flame, 2013, 160, 776-785. | 2.8 | 70 |
| 26 | Effects of heat release in laminar diffusion flames lifted on round jets. Combustion and Flame, 2003, 134, 355-368. | 2.8 | 69 |
| 27 | Estimation of the accuracy of PIV treatments for turbulent flow studies by direct numerical simulation of multi-phase flow. Measurement Science and Technology, 2001, 12, 1382-1391. | 1.4 | 64 |
| 28 | Chemistry reduction using machine learning trained from non-premixed micro-mixing modeling: Application to DNS of a syngas turbulent oxy-flame with side-wall effects. Combustion and Flame, 2020, 220, 119-129. | 2.8 | 63 |
| 29 | Finite-rate chemistry and transient effects in direct numerical simulations of turbulent nonpremixed flames. Combustion and Flame, 1995, 102, 285-297. | 2.8 | 61 |
| 30 | 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. | 2.8 | 60 |
| 31 | Using numerics to help the understanding of non-premixed turbulent flames. Proceedings of the Combustion Institute, 2000, 28, 11-24. | 2.4 | 58 |
| 32 | Stability diagram for lift-off and blowout of a round jet laminar diffusion flame. Combustion and Flame, 2001, 124, 646-655. | 2.8 | 58 |
| 33 | A compressible wall-adapting similarity mixed model for large-eddy simulation of the impinging round jet. Physics of Fluids, 2009, 21, . | 1.6 | 52 |
| 34 | Flame resolved simulation of a turbulent premixed bluff-body burner experiment. Part I: Analysis of the reaction zone dynamics with tabulated chemistry. Combustion and Flame, 2017, 180, 321-339. | 2.8 | 50 |
| 35 | Direct mapping from LES resolved scales to filtered-flame generated manifolds using convolutional neural networks. Combustion and Flame, 2019, 210, 71-82. | 2.8 | 49 |
| 36 | Two-dimensional weak shock-vortex interaction in a mixing zone. AIAA Journal, 1995, 33, 1797-1802. | 1.5 | 48 |

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| 37 | 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. | 2.8 | 48 |
| 38 | Selective Non-catalytic Reduction (SNCR) of Nitrogen Oxide Emissions: A Perspective from Numerical Modeling. Flow, Turbulence and Combustion, 2018, 100, 301-340. | 1.4 | 48 |
| 39 | Tabulation of NOx chemistry for Large-Eddy Simulation of non-premixed turbulent flames. Proceedings of the Combustion Institute, 2009, 32, 1555-1561. | 2.4 | 47 |
| 40 | Response of the dynamic LES model to heat release induced effects. Physics of Fluids, 1996, 8, 2248-2250. | 1.6 | 46 |
| 41 | Estimation of three-dimensional flame surface densities from planar images in turbulent premixed combustion. Experiments in Fluids, 2010, 49, 267-278. | 1.1 | 42 |
| 42 | Measurement and kinetics of elemental and atomic potassium release from a burning biomass pellet. Proceedings of the Combustion Institute, 2019, 37, 2681-2688. | 2.4 | 42 |
| 43 | Progress Variable Variance and Filtered Rate Modelling Using Convolutional Neural Networks and Flamelet Methods. Flow, Turbulence and Combustion, 2019, 103, 485-501. | 1.4 | 41 |
| 44 | Investigating the effects of edge flames in liftoff in non-premixed turbulent combustion. Proceedings of the Combustion Institute, 1998, 27, 1239-1245. | 0.3 | 40 |
| 45 | Composition-space premixed flamelet solution with differential diffusion for in situ flamelet-generated manifolds. Combustion and Flame, 2011, 158, 2009-2016. | 2.8 | 39 |
| 46 | Large Eddy Simulation of premixed turbulent combustion using approximate deconvolution and explicit flame filtering. Proceedings of the Combustion Institute, 2015, 35, 1349-1357. | 2.4 | 37 |
| 47 | Flame resolved simulation of a turbulent premixed bluff-body burner experiment. Part II: A-priori and a-posteriori investigation of sub-grid scale wrinkling closures in the context of artificially thickened flame modeling. Combustion and Flame, 2017, 180, 340-350. | 2.8 | 37 |
| 48 | Alkali metal emissions in an early-stage pulverized-coal flame: DNS analysis of reacting layers and chemistry tabulation. Proceedings of the Combustion Institute, 2019, 37, 2791-2799. | 2.4 | 36 |
| 49 | A new LES model coupling flame surface density and tabulated kinetics approaches to investigate knock and pre-ignition in piston engines. Proceedings of the Combustion Institute, 2011, 33, 3105-3114. | 2.4 | 34 |
| 50 | Subgrid-Scale Turbulent Micromixing: Dynamic Approach. AIAA Journal, 1998, 36, 336-341. | 1.5 | 33 |
| 51 | Direct numerical simulation of shock wavy-wall interaction: analysis of cellular shock structures and flow patterns. Journal of Fluid Mechanics, 2016, 789, 221-258. | 1.4 | 33 |
| 52 | Scalar energy fluctuations in Large-Eddy Simulation of turbulent flames: Statistical budgets and mesh quality criterion. Combustion and Flame, 2010, 157, 778-789. | 2.8 | 32 |
| 53 | Large Eddy Simulation of turbulent flames in a Trapped Vortex Combustor (TVC) â€“ A flamelet presumed-pdf closure preserving laminar flame speed. Comptes Rendus - Mecanique, 2012, 340, 917-932. | 2.1 | 32 |
| 54 | DNS and approximate deconvolution as a tool to analyse one-dimensional filtered flame sub-grid scale modelling. Combustion and Flame, 2017, 177, 109-122. | 2.8 | 31 |

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| 55 | Premixed flameâ€“wall interaction in a narrow channel: impact of wall thermal conductivity and heat losses. Journal of Fluid Mechanics, 2018, 856, 5-35. | 1.4 | 31 |
| 56 | Automatic reduction and optimisation of chemistry for turbulent combustion modelling: Impact of the canonical problem. Combustion and Flame, 2017, 175, 60-79. | 2.8 | 30 |
| 57 | Immersed Boundaries in Large Eddy Simulation of Compressible Flows. Flow, Turbulence and Combustion, 2013, 90, 29-68. | 1.4 | 29 |
| 58 | Hybrid presumed pdf and flame surface density approaches for Large-Eddy Simulation of premixed turbulent combustion. Combustion and Flame, 2011, 158, 1201-1214. | 2.8 | 28 |
| 59 | Two approaches of chemistry downsizing for simulating selective non catalytic reduction DeNOx process. Fuel, 2014, 118, 291-299. | 3.4 | 28 |
| 60 | Diffusion edge-flame: approximation of the flame tip DamkÃ¶hler number. Combustion and Flame, 2002, 130, 1-14. | 2.8 | 27 |
| 61 | CHEMICAL IMPACT OF CO AND H<sub>2</sub>ADDITION ON THE AUTO-IGNITION DELAY OF HOMOGENEOUS N-HEPTANE/AIR MIXTURES. Combustion Science and Technology, 2007, 179, 1937-1962. | 1.2 | 27 |
| 62 | Gradient and Counter-Gradient Modeling in Premixed Flames: Theoretical Study and Application to the LES of a Lean Premixed Turbulent Swirl-Burner. Combustion Science and Technology, 2010, 182, 465-479. | 1.2 | 27 |
| 63 | Combustion regime identification from machine learning trained by Raman/Rayleigh line measurements. Combustion and Flame, 2020, 219, 268-274. | 2.8 | 26 |
| 64 | A flame stability diagram for piloted non-premixed oxycombustion of low calorific residual gases. Proceedings of the Combustion Institute, 2007, 31, 3385-3392. | 2.4 | 25 |
| 65 | Subgrid-scale turbulent micromixing - Dynamic approach. AIAA Journal, 1998, 36, 336-341. | 1.5 | 24 |
| 66 | Combustion of residual steel gases: laminar flame analysis and turbulent flamelet modelingâ˜†. Fuel, 2003, 82, 983-991. | 3.4 | 23 |
| 67 | New Developments in Turbulent Combustion Modeling for Engine Design: ECFM-CLEH Combustion Submodel. , 2007, , . | | 23 |
| 68 | Local volumetric dilatation rate and scalar geometries in a premixed methaneâ€“air turbulent jet flame. Proceedings of the Combustion Institute, 2015, 35, 1295-1303. | 2.4 | 23 |
| 69 | Machine learning for integrating combustion chemistry in numerical simulations. Energy and AI, 2021, 5, 100082. | 5.8 | 23 |
| 70 | Hydrogenâ€“sulphur oxy-flame analysis and single-step flame tabulated chemistry. Fuel, 2004, 83, 605-614. | 3.4 | 22 |
| 71 | Self-similar behavior and chemistry tabulation of burnt-gas diluted premixed flamelets including heat-loss. Combustion Theory and Modelling, 2010, 14, 541-570. | 1.0 | 21 |
| 72 | Mixing time-history effects in Large Eddy Simulation of non-premixed turbulent flames: Flow-Controlled Chemistry Tabulation. Combustion and Flame, 2012, 159, 336-352. | 2.8 | 21 |

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| 73 | Optimized Reduced Chemistry and Molecular Transport for Large Eddy Simulation of Partially Premixed Combustion in a Gas Turbine. Combustion Science and Technology, 2016, 188, 21-39. | 1.2 | 21 |
| 74 | Assessing multi-regime combustion in a novel burner configuration with large eddy simulations using tabulated chemistry. Proceedings of the Combustion Institute, 2021, 38, 2551-2558. | 2.4 | 21 |
| 75 | Large eddy simulation of turbulent flows in reversing systems. Journal of Turbulence, 2003, 4, . | 0.5 | 20 |
| 76 | Self-ignition scenarios after rapid compression of a turbulent mixture weakly-stratified in temperature. Combustion and Flame, 2012, 159, 3358-3371. | 2.8 | 20 |
| 77 | 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. | 2.8 | 20 |
| 78 | Hybrid Transported-Tabulated Strategy to Downsize Detailed Chemistry for Numerical Simulation of Premixed Flames. Flow, Turbulence and Combustion, 2014, 92, 175-200. | 1.4 | 20 |
| 79 | Model Equation for the Dynamics of Wrinkled Shockwaves: Comparison with DNS and Experiments. Combustion Science and Technology, 2015, 187, 296-323. | 1.2 | 20 |
| 80 | A self-contained progress variable space solution method for thermochemical variables and flame speed in freely-propagating premixed flamelets. Proceedings of the Combustion Institute, 2019, 37, 1529-1536. | 2.4 | 20 |
| 81 | Large eddy simulation of selective non-catalytic reduction (SNCR): A downsizing procedure for simulating nitric-oxide reduction units. Chemical Engineering Science, 2016, 139, 285-303. | 1.9 | 19 |
| 82 | A Priori Assessment of an Iterative Deconvolution Method for LES Sub-grid Scale Variance Modelling. Flow, Turbulence and Combustion, 2018, 101, 33-53. | 1.4 | 19 |
| 83 | A self-contained composition space solution method for strained and curved premixed flamelets. Combustion and Flame, 2019, 207, 342-355. | 2.8 | 19 |
| 84 | Numerical study of HCl and SO2 impact on potassium emissions in pulverized-biomass combustion. Fuel Processing Technology, 2019, 193, 19-30. | 3.7 | 19 |
| 85 | Modeling Engine Turbulent Auto-Ignition Using Tabulated Detailed Chemistry. , 2007, , . | | 18 |
| 86 | Modelling alkali metal emissions in large-eddy simulation of a preheated pulverised-coal turbulent jet flame using tabulated chemistry. Combustion Theory and Modelling, 2018, 22, 203-236. | 1.0 | 18 |
| 87 | Machine learning for detailed chemistry reduction in DNS of a syngas turbulent oxy-flame with side-wall effects. Proceedings of the Combustion Institute, 2021, 38, 2825-2833. | 2.4 | 17 |
| 88 | Large-eddy simulation of H<sub>2</sub>â€“air auto-ignition using tabulated detailed chemistry. Journal of Turbulence, 2008, 9, N13. | 0.5 | 16 |
| 89 | Scalar flux modeling in turbulent flames using iterative deconvolution. Physical Review Fluids, 2018, 3, . | 1.0 | 16 |
| 90 | Effects of the Local Flow Topologies Upon the Structure of a Premixed Methane-air Turbulent Jet Flame. Flow, Turbulence and Combustion, 2016, 96, 535-546. | 1.4 | 15 |

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| 91 | Auto-thermal reforming (ATR) of natural gas: An automated derivation of optimised reduced chemical schemes. Proceedings of the Combustion Institute, 2017, 36, 3321-3330. | 2.4 | 15 |
| 92 | A hybrid stochastic/fixed-sectional method for solving the population balance equation. Chemical Engineering Science, 2019, 209, 115198. | 1.9 | 15 |
| 93 | Entropy preserving low dissipative shock capturing with wave-characteristic based sensor for high-order methods. Computers and Fluids, 2020, 197, 104357. | 1.3 | 15 |
| 94 | Interlinks between approaches for modeling turbulent flames. Proceedings of the Combustion Institute, 2000, 28, 175-183. | 2.4 | 14 |
| 95 | Using self-similar properties of turbulent premixed flames to downsize chemical tables in high-performance numerical simulations. Combustion Theory and Modelling, 2008, 12, 1055-1088. | 1.0 | 14 |
| 96 | Simulating upstream flame propagation in a narrow channel after wall preheating: Flame analysis and chemistry reduction strategy. Combustion and Flame, 2019, 200, 219-231. | 2.8 | 14 |
| 97 | Solving the population balance equation for non-inertial particles dynamics using probability density function and neural networks: Application to a sooting flame. Physics of Fluids, 2021, 33, . | 1.6 | 14 |
| 98 | Flow streamline based Navierâ€“Stokes Characteristic Boundary Conditions: Modeling for transverse and corner outflows. Computers and Fluids, 2011, 51, 115-126. | 1.3 | 13 |
| 99 | A multi-zone self-similar chemistry tabulation with application to auto-ignition including cool-flames effects. Fuel, 2012, 91, 87-92. | 3.4 | 13 |
| 100 | Evaluation of a Neural Network-Based Closure for the Unresolved Stresses in Turbulent Premixed V-Flames. Flow, Turbulence and Combustion, 2021, 106, 331-356. | 1.4 | 13 |
| 101 | Prediction of ignition delay times of Jet A-1/hydrogen fuel mixture using machine learning. Aerospace Science and Technology, 2022, 127, 107675. | 2.5 | 13 |
| 102 | 3-D CFD Analysis of the Combustion Process in a DI Diesel Engine using a Flamelet Model. , 0, , . | | 12 |
| 103 | Numerical Study of Smoothly Perturbed Shocks in the Newtonian Limit. Flow, Turbulence and Combustion, 2017, 99, 887-908. | 1.4 | 12 |
| 104 | Analysis of sub-grid scale modeling of the ideal-gas equation of state in hydrogenâ€“oxygen premixed flames. Proceedings of the Combustion Institute, 2019, 37, 2345-2351. | 2.4 | 12 |
| 105 | Numerical study of HCl and SO2 impact on sodium emissions in pulverized-coal flames. Fuel, 2019, 250, 315-326. | 3.4 | 12 |
| 106 | DNS study of spray vaporization and turbulent micro-mixing. , 1998, , . | | 11 |
| 107 | DNS of partially premixed flame propagating in a turbulent rotating flow. Proceedings of the Combustion Institute, 2007, 31, 1657-1664. | 2.4 | 11 |
| 108 | The role of gravity in the asymmetry of flames in narrow combustion chambers. Combustion and Flame, 2019, 203, 238-246. | 2.8 | 11 |

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| 109 | Simulation of char-pellet combustion and sodium release inside porous char using lattice Boltzmann method. Combustion and Flame, 2020, 211, 325-336. | 2.8 | 11 |
| 110 | Hybrid presumed pdf and flame surface density approaches for Large-Eddy Simulation of premixed turbulent combustion. Part 2: Early flame development after sparking. Combustion and Flame, 2011, 158, 1215-1226. | 2.8 | 10 |
| 111 | Analysis of the Soot Particle Size Distribution in a Laminar Premixed Flame: A Hybrid Stochastic/Fixed-Sectional Approach. Flow, Turbulence and Combustion, 2020, 104, 753-775. | 1.4 | 10 |
| 112 | Unresolved stress tensor modeling in turbulent premixed V-flames using iterative deconvolution: An a priori assessment. Physical Review Fluids, 2019, 4, . | 1.0 | 9 |
| 113 | Heat release effects on mixing scales of non-premixed turbulent wall-jets: A direct numerical simulation study. International Journal of Heat and Fluid Flow, 2013, 40, 65-80. | 1.1 | 8 |
| 114 | DNS Analysis of Wall Heat Transfer and Combustion Regimes in a Turbulent Non-premixed Wall-jet Flame. Flow, Turbulence and Combustion, 2016, 97, 951-969. | 1.4 | 8 |
| 115 | Using staggered grids with characteristic boundary conditions when solving compressible reactive Navierâ€“Stokes equations. International Journal for Numerical Methods in Fluids, 2012, 68, 546-563. | 0.9 | 7 |
| 116 | Derivation and analysis of two-dimensional composition space equations for multi-regime combustion using orthogonal coordinates. Combustion and Flame, 2020, 218, 205-217. | 2.8 | 7 |
| 117 | Influence of a Central Jet on Isothermal and Reacting Swirling Flow in a Model Combustion Chamber. Energies, 2022, 15, 1615. | 1.6 | 7 |
| 118 | Modeling non-premixed turbulent combustion in aeronautical engines using PDF-generator. , 1998, , . | | 6 |
| 119 | Large Eddy Simulation of compressible turbulent flows. , 1999, , . | | 6 |
| 120 | Reynolds Number Effects on Statistics and Structure of an Isothermal Reacting Turbulent Wall-Jet. Flow, Turbulence and Combustion, 2014, 92, 931-945. | 1.4 | 6 |
| 121 | Reducedâ€order modeling for the control of selective noncatalytic reduction of nitrogen monoxide. AICHE Journal, 2016, 62, 928-938. | 1.8 | 6 |
| 122 | A Comparative Study from Spectral Analyses of High-Order Methods with Non-Constant Advection Velocities. Journal of Scientific Computing, 2021, 87, 1. | 1.1 | 6 |
| 123 | Turbulence kinetic energy transfers in direct numerical simulation of shock-waveâ€“turbulence interaction in a compression/expansion ramp. Journal of Fluid Mechanics, 2022, 935, . | 1.4 | 6 |
| 124 | Vitiated High Karlovitz n-decane/air Turbulent Flames: Scaling Laws and Micro-mixing Modeling Analysis. Flow, Turbulence and Combustion, 2019, 102, 235-252. | 1.4 | 5 |
| 125 | Flameless combustion of low calorific value gases, experiments, and simulations with advanced radiative heat transfer modeling. Physics of Fluids, 2022, 34, . | 1.6 | 5 |
| 126 | Eulerian Scalar Projection in Lagrangian Point Source Context: An Approximate Inverse Filtering Approach. Flow, Turbulence and Combustion, 2016, 97, 363-368. | 1.4 | 4 |

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| 127 | Analysis of High-order Explicit LES Dynamic Modeling Applied to Airfoil Flows. Flow, Turbulence and Combustion, 2022, 108, 77-104. | 1.4 | 4 |
| 128 | DNS of premixed turbulent V-flame: coupling spectral and finite difference methods. Comptes Rendus - Mecanique, 2005, 333, 95-102. | 2.1 | 3 |
| 129 | Assessment of subgrid-scale stress statistics in non-premixed turbulent wall-jet flames. Journal of Turbulence, 2016, 17, 471-490. | 0.5 | 3 |
| 130 | One-dimensional dynamics of gaseous detonations revisited. Combustion and Flame, 2021, 232, 111535. | 2.8 | 3 |
| 131 | Dynamic Subgrid Pdf Modeling for Nonpremixed Turbulent Combustion. ERCOFTAC Series, 1997, , 311-320. | 0.1 | 3 |
| 132 | Development of reduced and optimized reaction mechanism for potassium emissions during biomass combustion based on genetic algorithms. Energy, 2020, 211, 118565. | 4.5 | 3 |
| 133 | Direct Numerical Simulation (DNS) of Premixed Turbulent V-Flames. , 2003, , . | | 2 |
| 134 | Two recent developments in numerical simulation of premixed and partially premixed turbulent flames. Comptes Rendus - Mecanique, 2006, 334, 523-530. | 2.1 | 2 |
| 135 | A turbulent-energy based mesh refinement procedure for Large Eddy Simulation. Springer Proceedings in Physics, 2007, , 413-415. | 0.1 | 2 |
| 136 | Turbulent flame spreading mechanisms after spark ignition. , 2009, , . | | 2 |
| 137 | A massively parallel solution strategy for efficient thermal radiation simulation. Journal of Physics: Conference Series, 2012, 369, 012017. | 0.3 | 2 |
| 138 | Quantification of the Pre-ignition Front Propagation in DNS of Rapidly Compressed Mixture. Flow, Turbulence and Combustion, 2015, 94, 219-235. | 1.4 | 2 |
| 139 | Analysis of combustion modeling tools using DNS of a non-premixed turbulent wall-jet. , 2012, , . | | 2 |
| 140 | Dynamics of isoconcentration surfaces in weak shock turbulent mixing interaction. , 1996, , . | | 1 |
| 141 | Verification of a low Mach variable-density Navier-Stokes solver for turbulent combustion. Journal of Physics: Conference Series, 2016, 754, 062005. | 0.3 | 1 |
| 142 | Reduced chemical reaction mechanisms for simulating sodium emissions by solid-fuel combustion. Applications in Energy and Combustion Science, 2020, 1-4, 100009. | 0.9 | 1 |
| 143 | LES of compression ramp using high-order dynamic SGS modeling. , 2021, , . | | 1 |
| 144 | Revisiting the relation between premixed flame brush thickness and turbulent burning velocities from Ken Brayâ€™s notes. Combustion and Flame, 2022, 239, 111706. | 2.8 | 1 |

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| 145 | Modeling partially premixed turbulent combustion. , 2001, , 161-180. | | 1 |
| 146 | The Calculation of Local Fluctuations in Non Premixed Turbulent Flames. , 1991, , 83-113. | | 1 |
| 147 | Scalar sub-grid energy in large-eddy simulation of turbulent flames: mesh quality criterion. ERCOFTAC Series, 2011, , 201-210. | 0.1 | 1 |
| 148 | Numerical Simulation of Combustion in Partially Premixed Turbulent Flows. , 1998, , 203-221. | | 1 |
| 149 | Assessment of deconvolution-based flamelet methods for progress variable rate modeling. Aeronautics and Aerospace Open Access Journal, 2018, 2, . | 0.1 | 1 |
| 150 | From Discrete and Iterative Deconvolution Operators to Machine Learning for Premixed Turbulent Combustion Modeling. , 2020, , 215-232. | | 1 |
| 151 | A conservative Eulerian-Lagrangian decomposition principle for the solution of multi-scale flow problems at high Schmidt or Prandtl numbers. Journal of Computational Physics, 2022, , 111216. | 1.9 | 1 |
| 152 | Quelques aspects de la modÃ©lisation numÃ©rique appliquÃ©e Ã  la combustion turbulente. Revue Europeenne Des Elements, 1996, 5, 161-196. | 0.1 | 0 |
| 153 | Dynamics of isoconcentration surfaces in weak shock turbulent mixing interaction. AIAA Journal, 1996, 34, 2539-2544. | 1.5 | 0 |
| 154 | Studying turbulent plasma using direct numerical simulation and probability density function. , 1998, , . | | 0 |
| 155 | Partial premixing in diffusion flame quenching. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2001, 81, 525-526. | 0.9 | 0 |
| 156 | An hybrid transported-tabulated strategy to downsize detailed chemistry for Direct Numerical Simulation. , 2013, , . | | 0 |
| 157 | Large-Eddy Simulation of Alkali Metal Reacting Dynamics in a Preheated Pulverized-Coal Jet Flame Using Tabulated Chemistry. , 2017, , . | | 0 |
| 158 | Progress in Clean-Combustion Science and Technology. Flow, Turbulence and Combustion, 2021, 106, 293-294. | 1.4 | 0 |
| 159 | LES of Partially Premixed Combustion. Fluid Mechanics and Its Applications, 2002, , 235-249. | 0.1 | 0 |
| 160 | Diffusion Edge-Flame Quenching. Fluid Mechanics and Its Applications, 2002, , 161-168. | 0.1 | 0 |
| 161 | Modeling Partially Premixed Turbulent Combustion. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2003, , 139-158. | 0.2 | 0 |
| 162 | A WALE-Similarity Mixed Model for Large-Eddy Simulation of Wall Bounded Compressible Turbulent Flows. ERCOFTAC Series, 2010, , 563-569. | 0.1 | 0 |

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| 163 | Immersed Boundaries in Large-Eddy Simulation of a transonic cavity flow. ERCOFTAC Series, 2011, , 119-124. | 0.1 | 0 |
| 164 | Modeling differential diffusion in Large Eddy Simulation of a bluff body stabilized premixed weakly-turbulent flame. , 2012, , . | | 0 |
| 165 | Recent developments in turbulent combustion modeling: automated progress variables definition - Ignition combustion regimes after rapid compression. , 2012, , . | | 0 |
| 166 | Numerical Simulation of Combustion in Partially Premixed Turbulent Flows. Notes on Numerical Fluid Mechanics, 1998, , 203-221. | 0.1 | 0 |
| 167 | DNS to Help Understanding of Non-Premixed Turbulent Flames. Fluid Mechanics and Its Applications, 1999, , 49-59. | 0.1 | 0 |
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