

# Maxence Lailliau

## List of Publications by Year in descending order

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84  
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| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Experimental and kinetic modeling study of n-pentane oxidation at 10 atm, Detection of complex low-temperature products by Q-Exactive Orbitrap. <i>Combustion and Flame</i> , 2022, 235, 111723.                       | 5.2 | 9         |
| 2  | Experimental study and numerical validation of oxy-ammonia combustion at elevated temperatures and pressures. <i>Combustion and Flame</i> , 2022, 236, 111819.   | 5.2 | 23        |
| 3  | Gasoline Surrogate Oxidation in a Motored Engine, a JSR, and an RCM: Characterization of Cool-Flame Products by High-Resolution Mass Spectrometry. <i>Energy &amp; Fuels</i> , 2022, 36, 3893-3908.                    | 5.1 | 5         |
| 4  | Revisiting low temperature oxidation chemistry of n-heptane. <i>Combustion and Flame</i> , 2022, 242, 112177.  | 5.2 | 15        |
| 5  | A pyrolysis study on C4–C8 symmetric ethers. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 329-336.   | 3.9 | 10        |
| 6  | Oxidation of di-n-propyl ether: Characterization of low-temperature products. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 337-344.  | 3.9 | 22        |
| 7  | Oxidation of pentan-2-ol – part II: Experimental and modeling study. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 833-841.   | 3.9 | 4         |
| 8  | Oxidation of pentan-2-ol – Part I: Theoretical investigation on the decomposition and isomerization reactions of pentan-2-ol radicals. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 823-832.             | 3.9 | 7         |
| 9  | Experimental and numerical studies of the diluent influence (N <sub>2</sub> , Ar, He, Xe) on stable premixed methane flames in micro-combustion. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 6753-6761. | 3.9 | 11        |
| 10 | Experimental characterization of n-heptane low-temperature oxidation products including keto-hydroperoxides and highly oxygenated organic molecules (HOMs). <i>Combustion and Flame</i> , 2021, 224, 83-93.            | 5.2 | 22        |
| 11 | An experimental and kinetic modeling study on the oxidation of 1,3-dioxolane. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 543-553.  | 3.9 | 28        |
| 12 | On the similarities and differences between the products of oxidation of hydrocarbons under simulated atmospheric conditions and cool flames. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 7845-7862.          | 4.9 | 10        |
| 13 | Polar Aromatic Compounds in Soot from Premixed Flames of Kerosene, Synthetic Paraffinic Kerosene, and Kerosene–Synthetic Biofuels. <i>Energy &amp; Fuels</i> , 2021, 35, 11427-11444.                                  | 5.1 | 2         |
| 14 | Oxidation of C <sub>5</sub> esters: Influence of the position of the ester function. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 1124-1132.  | 1.6 | 4         |
| 15 | Low-temperature oxidation of a gasoline surrogate: Experimental investigation in JSR and RCM using high-resolution mass spectrometry. <i>Combustion and Flame</i> , 2021, 228, 128-141.                                | 5.2 | 7         |
| 16 | Oxidation of diethyl ether: Extensive characterization of products formed at low temperature using high resolution mass spectrometry. <i>Combustion and Flame</i> , 2021, 228, 340-350.                                | 5.2 | 12        |
| 17 | Experimental and kinetic modeling study of n-hexane oxidation. Detection of complex low-temperature products using high-resolution mass spectrometry. <i>Combustion and Flame</i> , 2021, 233, 111581.                 | 5.2 | 12        |
| 18 | Experimental Characterization of Tetrahydrofuran Low-Temperature Oxidation Products Including Ketohydroperoxides and Highly Oxygenated Molecules. <i>Energy &amp; Fuels</i> , 2021, 35, 7242-7252.                     | 5.1 | 13        |

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|----|--|-----|-----------|
| 19 | Towards a Comprehensive Characterization of the Low-Temperature Autoxidation of Di-n-Butyl Ether. <i>Molecules</i> , 2021, 26, 7174.   | 3.8 | 6         |
| 20 | A high pressure oxidation study of di-n-propyl ether. <i>Fuel</i> , 2020, 263, 116554.   | 6.4 | 14        |
| 21 | Oxidation of di-n-butyl ether: Experimental characterization of low-temperature products in JSR and RCM. <i>Combustion and Flame</i> , 2020, 222, 133-144.   | 5.2 | 25        |
| 22 | Methyl-3-hexenoate combustion chemistry: Experimental study and numerical kinetic simulation. <i>Combustion and Flame</i> , 2020, 222, 170-180.  | 5.2 | 11        |
| 23 | Kinetics of propyl acetate oxidation: Experiments in a jet-stirred reactor, ab initio calculations, and rate constant determination. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 429-436. | 3.9 | 15        |
| 24 | An experimental and modeling study of the oxidation of 3-pentanol at high pressure. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 477-484.  | 3.9 | 8         |
| 25 | Insights into the oxidation kinetics of a cetane improver "1,2-dimethoxyethane (1,2-DME) with experimental and modeling methods. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 555-564.     | 3.9 | 12        |
| 26 | Kinetics of oxidation of levulinic biofuels in a jet-stirred reactor: Methyl levulinate. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 381-388.   | 3.9 | 5         |
| 27 | Pyrolysis of butane-2,3-dione from low to high pressures: Implications for methyl-related growth chemistry. <i>Combustion and Flame</i> , 2019, 200, 69-81.  | 5.2 | 13        |
| 28 | More insight into cyclohexanone oxidation: Jet-stirred reactor experiments and kinetic modeling. <i>Fuel</i> , 2018, 220, 908-915.   | 6.4 | 4         |
| 29 | An experimental chemical kinetic study of the oxidation of diethyl ether in a jet-stirred reactor and comprehensive modeling. <i>Combustion and Flame</i> , 2018, 193, 453-462.                          | 5.2 | 43        |
| 30 | Pulsating combustion of ethylene in micro-channels with controlled temperature gradient. <i>Combustion Science and Technology</i> , 2018, , 1-11.  | 2.3 | 2         |
| 31 | Experimental and modeling studies of a biofuel surrogate compound: laminar burning velocities and jet-stirred reactor measurements of anisole. <i>Combustion and Flame</i> , 2018, 189, 325-336.         | 5.2 | 49        |
| 32 | Exploration of the oxidation chemistry of dimethoxymethane: Jet-stirred reactor experiments and kinetic modeling. <i>Combustion and Flame</i> , 2018, 193, 491-501.                                      | 5.2 | 50        |
| 33 | Experimental and Modeling Study of the Oxidation of Two Branched Aldehydes in a Jet-Stirred Reactor: 2-Methylbutanal and 3-Methylbutanal. <i>Energy &amp; Fuels</i> , 2017, 31, 3206-3218.               | 5.1 | 4         |
| 34 | A Chemical Kinetic Investigation on Butyl Formate Oxidation: <i>Ab Initio</i> Calculations and Experiments in a Jet-Stirred Reactor. <i>Energy &amp; Fuels</i> , 2017, 31, 6194-6205.                    | 5.1 | 7         |
| 35 | Screening Method for Fuels in Homogeneous Charge Compression Ignition Engines: Application to Valeric Biofuels. <i>Energy &amp; Fuels</i> , 2017, 31, 607-614.   | 5.1 | 22        |
| 36 | A chemical kinetic study of the oxidation of dibutyl-ether in a jet-stirred reactor. <i>Combustion and Flame</i> , 2017, 185, 4-15.  | 5.2 | 58        |

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|----|--|------|-----------|
| 37 | Burning velocities and jet-stirred reactor oxidation of diethyl carbonate. Proceedings of the Combustion Institute, 2017, 36, 553-560.   | 3.9  | 20        |
| 38 | Experimental and Detailed Kinetic Modeling Study of Cyclopentanone Oxidation in a Jet-Stirred Reactor at 1 and 10 atm. Energy & Fuels, 2017, 31, 2144-2155.  | 5.1  | 22        |
| 39 | An experimental study in a jet-stirred reactor and a comprehensive kinetic mechanism for the oxidation of methyl ethyl ketone. Proceedings of the Combustion Institute, 2017, 36, 459-467.   | 3.9  | 40        |
| 40 | Experimental and Kinetic Modeling of the Oxidation of Synthetic Jet Fuels and Surrogates. Combustion Science and Technology, 2016, 188, 1705-1718.   | 2.3  | 10        |
| 41 | Combustion in micro-channels with a controlled temperature gradient. Experimental Thermal and Fluid Science, 2016, 73, 79-86.  | 2.7  | 59        |
| 42 | Oscillating flames in micro-combustion. Combustion and Flame, 2016, 167, 392-394.  | 5.2  | 42        |
| 43 | An Experimental and Kinetic Modeling Study of Premixed Laminar Flames of Methyl Pentanoate and Methyl Hexanoate. Zeitschrift Fur Physikalische Chemie, 2015, 229, 759-780.   | 2.8  | 29        |
| 44 | Identification and Quantification of Aromatic Hydrocarbons Adsorbed on Soot from Premixed Flames of Kerosene, Synthetic Kerosene, and Kerosene- $\alpha$ -Synthetic Biofuels. Energy & Fuels, 2015, 29, 6556-6564.   | 5.1  | 9         |
| 45 | The Combustion of Synthetic Jet Fuels (Gas to Liquid and Coal to Liquid) and Multi-Component Surrogates: Experimental and Modeling Study. , 2015, , .  |      | 4         |
| 46 | Experimental and Modeling Study of the Oxidation of 1-Butene and <i>cis</i> -2-Butene in a Jet-Stirred Reactor and a Combustion Vessel. Energy & Fuels, 2015, 29, 1107-1118.   | 5.1  | 37        |
| 47 | Quantification of HO <sub>2</sub> and other products of dimethyl ether oxidation (H <sub>2</sub> O <sub>2</sub> , H <sub>2</sub> O, and CH <sub>2</sub> O) in a jet-stirred reactor at elevated temperatures by low-pressure sampling and continuous-wave cavity ring-down spectroscopy. Fuel, 2015, 158, 248-252.   | 6.4  | 23        |
| 48 | Ozone applied to the homogeneous charge compression ignition engine to control alcohol fuels combustion. Applied Energy, 2015, 160, 566-580.   | 10.1 | 60        |
| 49 | Combustion and Emissions Characteristics of Valeric Biofuels in a Compression Ignition Engine. Journal of Energy Engineering - ASCE, 2014, 140, .  | 1.9  | 27        |
| 50 | Combustion of a Gas-to-Liquid-Based Alternative Jet Fuel: Experimental and Detailed Kinetic Modeling. Combustion Science and Technology, 2014, 186, 1275-1283.   | 2.3  | 8         |
| 51 | Quantitative Measurements of HO <sub>2</sub> and Other Products of <i>n</i> -Butane Oxidation (H <sub>2</sub> O <sub>2</sub> , H <sub>2</sub> O, CH <sub>2</sub> O, and Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (C) with Sampling Nozzle and Cavity Ring-Down Spectroscopy (cw-CRDS). Journal of the American Chemical Society, 2014, 136, 16689-16694. | 13.7 | 27        |
| 52 | New insights into the peculiar behavior of laminar burning velocities of hydrogen-air flames according to pressure and equivalence ratio. Combustion and Flame, 2014, 161, 2235-2241.  | 5.2  | 48        |
| 53 | Experimental and detailed kinetic model for the oxidation of a Gas to Liquid (GtL) jet fuel. Combustion and Flame, 2014, 161, 835-847.   | 5.2  | 111       |
| 54 | An experimental and modeling study of 2-methyl-1-butanol oxidation in a jet-stirred reactor. Combustion and Flame, 2014, 161, 3003-3013.   | 5.2  | 29        |

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|----|---|-----|-----------|
| 55 | Experimental Study of the Oxidation of <i>n</i> -Tetradecane in a Jet-Stirred Reactor (JSR) and Detailed Chemical Kinetic Modeling. <i>Combustion Science and Technology</i> , 2014, 186, 594-606.  | 2.3 | 9         |
| 56 | A comprehensive combustion chemistry study of 2,5-dimethylhexane. <i>Combustion and Flame</i> , 2014, 161, 1444-1459.   | 5.2 | 88        |
| 57 | Experimental and kinetic modeling study of trans-methyl-3-hexenoate oxidation in JSR and the role of CC double bond. <i>Combustion and Flame</i> , 2014, 161, 818-825.  | 5.2 | 38        |
| 58 | Low temperature oxidation of n-hexane in a flow reactor. <i>Fuel</i> , 2014, 126, 282-293.  | 6.4 | 25        |
| 59 | Homogeneous Charge Compression Ignition Combustion of Primary Reference Fuels Influenced by Ozone Addition. <i>Energy &amp; Fuels</i> , 2013, 27, 5495-5505.  | 5.1 | 60        |
| 60 | Experimental Study of Tetralin Oxidation and Kinetic Modeling of Its Pyrolysis and Oxidation. <i>Energy &amp; Fuels</i> , 2013, 27, 1576-1585.  | 5.1 | 24        |
| 61 | A comprehensive experimental and modeling study of iso-pentanol combustion. <i>Combustion and Flame</i> , 2013, 160, 2712-2728.   | 5.2 | 95        |
| 62 | Experimental and modeling study of the oxidation of n- and iso-butanal. <i>Combustion and Flame</i> , 2013, 160, 1609-1626.   | 5.2 | 40        |
| 63 | Experimental and Kinetic Modeling Study of 3-Methylheptane in a Jet-Stirred Reactor. <i>Energy &amp; Fuels</i> , 2012, 26, 4680-4689.   | 5.1 | 28        |
| 64 | Experimental and Modeling Study of the Oxidation Kinetics of <i>n</i> -Undecane and <i>n</i> -Dodecane in a Jet-Stirred Reactor. <i>Energy &amp; Fuels</i> , 2012, 26, 4253-4268.   | 5.1 | 70        |
| 65 | Experimental and Detailed Kinetic Modeling Study of Ethyl Pentanoate (Ethyl Valerate) Oxidation in a Jet Stirred Reactor and Laminar Burning Velocities in a Spherical Combustion Chamber. <i>Energy &amp; Fuels</i> , 2012, 26, 4735-4748. | 5.1 | 55        |
| 66 | Experimental and modeling investigation of the low-temperature oxidation of n-heptane. <i>Combustion and Flame</i> , 2012, 159, 3455-3471.  | 5.2 | 165       |
| 67 | Laminar Burning Velocities of C <sub>4</sub> –C <sub>7</sub> Ethyl Esters in a Spherical Combustion Chamber: Experimental and Detailed Kinetic Modeling. <i>Energy &amp; Fuels</i> , 2012, 26, 6669-6677.                                   | 5.1 | 43        |
| 68 | Oxidation of a Coal-to-Liquid Synthetic Jet Fuel: Experimental and Chemical Kinetic Modeling Study. <i>Energy &amp; Fuels</i> , 2012, 26, 6070-6079.  | 5.1 | 50        |
| 69 | Experimental and Detailed Kinetic Modeling Study of Isoamyl Alcohol (Isopentanol) Oxidation in a Jet-Stirred Reactor at Elevated Pressure. <i>Energy &amp; Fuels</i> , 2011, 25, 4986-4998.   | 5.1 | 76        |
| 70 | Experimental and Modeling Study of the Kinetics of Oxidation of Simple Biodiesel~Biobutanol Surrogates: Methyl Octanoate~Butanol Mixtures. <i>Energy &amp; Fuels</i> , 2010, 24, 3906-3916.   | 5.1 | 39        |
| 71 | Chemical Kinetic Study of the Oxidation of a Biodiesel~Bioethanol Surrogate Fuel: Methyl Octanoate~Ethanol Mixtures. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3896-3908.   | 2.5 | 26        |
| 72 | Detailed Kinetic Mechanism for the Oxidation of Vegetable Oil Methyl Esters: New Evidence from Methyl Heptanoate. <i>Energy &amp; Fuels</i> , 2009, 23, 4254-4268.  | 5.1 | 62        |

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|----|--|-----|-----------|
| 73 | Experimental and Kinetic Modeling Study of the Oxidation of Methyl Hexanoate. Energy & Fuels, 2008, 22, 1469-1479.   | 5.1 | 94        |
| 74 | High pressure effects on the mutual sensitization of the oxidation of NO and CH <sub>4</sub> -C <sub>2</sub> H <sub>6</sub> blends. Physical Chemistry Chemical Physics, 2007, 9, 4230.                                  | 2.8 | 71        |
| 75 | EFFECTS OF AIR CONTAMINATION ON THE COMBUSTION OF HYDROGEN-EFFECT OF NO AND NO <sub>2</sub> ADDITION ON HYDROGEN IGNITION AND OXIDATION KINETICS. Combustion Science and Technology, 2006, 178, 1999-2024.               | 2.3 | 71        |
| 76 | Mutual Sensitization of the Oxidation of Nitric Oxide and a Natural Gas Blend in a JSR at Elevated Pressure: An Experimental and Detailed Kinetic Modeling Study. Journal of Physical Chemistry A, 2006, 110, 6608-6616. | 2.5 | 25        |
| 77 | Hydrogen-enriched natural gas blend oxidation under high-pressure conditions: Experimental and detailed chemical kinetic modeling. International Journal of Hydrogen Energy, 2006, 31, 505-515.                          | 7.1 | 53        |
| 78 | Rich methane premixed laminar flames doped with light unsaturated hydrocarbons. Allene and propyne. Combustion and Flame, 2006, 146, 620-634.  | 5.2 | 32        |
| 79 | The high-pressure reduction of nitric oxide by a natural gas blend. Combustion and Flame, 2005, 143, 135-137.  | 5.2 | 13        |
| 80 | Experimental and modeling study of the oxidation of 1-pentene at high temperature. International Journal of Chemical Kinetics, 2005, 37, 451-463.  | 1.6 | 62        |
| 81 | EXPERIMENTAL STUDY AND DETAILED KINETIC MODELING OF THE MUTUAL SENSITIZATION OF THE OXIDATION OF NITRIC OXIDE, ETHYLENE, AND ETHANE. Combustion Science and Technology, 2005, 177, 1767-1791.                            | 2.3 | 47        |
| 82 | Experimental and modeling study of the oxidation of cyclohexene. International Journal of Chemical Kinetics, 2003, 35, 273-285.  | 1.6 | 59        |
| 83 | Pressure measurements and an analytical model for laser-generated shock waves in solids at low irradiance. Journal of Physics Condensed Matter, 2002, 14, 10793-10797.   | 1.8 | 3         |
| 84 | Low-Temperature Oxidation of Di-n-Butyl Ether in a Motored Homogeneous Charge Compression Ignition (HCCI) Engine: Comparison of Characteristic Products with RCM and JSR Speciation by Orbitrap. Energy & Fuels, 0, , .  | 5.1 | 1         |