

# Olivier Mathieu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6538955/publications.pdf>

Version: 2024-02-01

52  
papers

3,571  
citations

279487

23  
h-index

197535

49  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1592  
citing authors

#	ARTICLE	IF	CITATIONS
1	An experimental and modeling study of ammonia pyrolysis. <i>Combustion and Flame</i> , 2022, 235, 111694.	2.8	48
2	A comprehensive experimental and modeling study of n-propylcyclohexane oxidation. <i>Combustion and Flame</i> , 2022, 238, 111944.	2.8	10
3	Shock-tube spectroscopic CO and H <sub>2</sub> O measurements during 2-methyl-1-butene combustion and chemical kinetics modeling. <i>Combustion and Flame</i> , 2022, 238, 111919.	2.8	8
4	Assessing NO <sub>2</sub> -Hydrocarbon Interactions during Combustion of NO <sub>2</sub> /Alkane/Ar Mixtures in a Shock Tube Using CO Time Histories. <i>Fuels</i> , 2022, 3, 1-14.	1.3	3
5	Shock-tube laser absorption measurements of N <sub>2</sub> O time histories during ammonia oxidation. <i>Fuel Communications</i> , 2022, 10, 100050.	2.0	23
6	Experimental Investigation of the Combustion Properties of an Average Thermal Runaway Gas Mixture from Li-Ion Batteries. <i>Energy &amp; Fuels</i> , 2022, 36, 3247-3258.	2.5	19
7	A Shock-Tube and Chemical Kinetics Model Investigation Encompassing all Five Pentene Isomers. <i>Fuel</i> , 2022, 323, 124223.	3.4	4
8	Experimental study of the formation of CO during ethanol pyrolysis and dry reforming with CO <sub>2</sub> . <i>Applications in Energy and Combustion Science</i> , 2022, 11, 100076.	0.9	0
9	Nitromethane pyrolysis in shock tubes and a micro flow reactor with a controlled temperature profile. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1007-1015.	2.4	7
10	Isopropanol dehydration reaction rate kinetics measurement using H <sub>2</sub> O time histories. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 536-547.	1.0	4
11	Shock-tube spectroscopic water measurements and detailed kinetics modeling of 1-pentene and 3-methyl-1-butene. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 67-83.	1.0	7
12	A comprehensive experimental and kinetic modeling study of 1-hexene. <i>Combustion and Flame</i> , 2021, 232, 111516.	2.8	13
13	An Experimental Kinetics Study of Isopropanol Pyrolysis and Oxidation behind Reflected Shock Waves. <i>Energies</i> , 2021, 14, 6808.	1.6	8
14	A Shock-Tube Study of the Rate Constant of PH <sub>3</sub> + M, PH <sub>2</sub> + H + M (M = Ar) Using PH <sub>3</sub> Laser Absorption. <i>Journal of Physical Chemistry A</i> , 2020, 124, 7380-7387.	1.1	1
15	Shock-Tube Laser Absorption Measurements of CO and H <sub>2</sub> O during Iso-Octane Combustion. <i>Energy &amp; Fuels</i> , 2020, 34, 7533-7544.	2.5	11
16	Ignition delay time and laminar flame speed measurements of mixtures containing diisopropyl-methylphosphonate (DIMP). <i>Combustion and Flame</i> , 2020, 215, 66-77.	2.8	9
17	Shock-tube studies of Sarin surrogates. <i>Shock Waves</i> , 2019, 29, 441-449.	1.0	8
18	Laminar flame speeds of DEMP, DMMP, and TEP added to H <sub>2</sub> - and CH <sub>4</sub> -air mixtures. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 3775-3781.	2.4	27

#	ARTICLE	IF	CITATIONS
19	Ethanol pyrolysis kinetics using H <sub>2</sub> O time history measurements behind reflected shock waves. Proceedings of the Combustion Institute, 2019, 37, 239-247.	2.4	19
20	Ignition delay times, laminar flame speeds, and species time-histories in the H <sub>2</sub> S/CH <sub>4</sub> system at atmospheric pressure. Proceedings of the Combustion Institute, 2019, 37, 735-742.	2.4	22
21	Experimental study of ethanol oxidation behind reflected shock waves: Ignition delay time and H <sub>2</sub> O laser-absorption measurements. Combustion and Flame, 2019, 208, 313-326.	2.8	38
22	H <sub>2</sub> O time histories in the H <sub>2</sub> /NO <sub>2</sub> system for validation of NO <sub>x</sub> hydrocarbon kinetics mechanisms. International Journal of Chemical Kinetics, 2019, 51, 669-678.	1.0	11
23	A Shock-Tube Autoignition Study of Jet, Rocket, and Diesel Fuels. Energy & Fuels, 2019, 33, 2516-2525.	2.5	18
24	Assessment of modern detailed kinetics mechanisms to predict CO formation from methane combustion using shock-tube laser-absorption measurements. Fuel, 2019, 236, 1164-1180.	3.4	34
25	Experimental and modeling study on the effects of dimethyl methylphosphonate (DMMP) addition on H <sub>2</sub> , CH <sub>4</sub> , and C <sub>2</sub> H <sub>4</sub> ignition. Combustion and Flame, 2018, 191, 320-334.	2.8	27
26	The unimportance of the reaction H <sub>2</sub> +N <sub>2</sub> O → H <sub>2</sub> O+N <sub>2</sub> : A shock-tube study using H <sub>2</sub> O time histories and ignition delay times. Combustion and Flame, 2018, 196, 478-486.	2.8	18
27	An experimental and chemical kinetic modeling study of 1,3-butadiene combustion: Ignition delay time and laminar flame speed measurements. Combustion and Flame, 2018, 197, 423-438.	2.8	432
28	Assessing the predictions of a NO <sub>x</sub> kinetic mechanism on recent hydrogen and syngas experimental data. Combustion and Flame, 2017, 182, 122-141.	2.8	168
29	Shock-tube water time-histories and ignition delay time measurements for H <sub>2</sub> S near atmospheric pressure. Proceedings of the Combustion Institute, 2017, 36, 4019-4027.	2.4	46
30	Assessing the Predictions of A NO <sub>x</sub> Kinetic Mechanism on Recent Hydrogen and Syngas Experimental Data. The Proceedings of the International Symposium on Diagnostics and Modeling of Combustion in Internal Combustion Engines, 2017, 2017.9, A307.	0.1	2
31	Nitromethane ignition behind reflected shock waves: Experimental and numerical study. Fuel, 2016, 182, 597-612.	3.4	45
32	A comprehensive experimental and modeling study of isobutene oxidation. Combustion and Flame, 2016, 167, 353-379.	2.8	282
33	An ignition delay time and chemical kinetic modeling study of the pentane isomers. Combustion and Flame, 2016, 163, 138-156.	2.8	177
34	An experimental and modeling study of propene oxidation. Part 2: Ignition delay time and flame speed measurements. Combustion and Flame, 2015, 162, 296-314.	2.8	270
35	Shock-induced ignition of methane sensitized by NO <sub>2</sub> and N <sub>2</sub> O. Combustion and Flame, 2015, 162, 3053-3070.	2.8	60
36	Experimental and Kinetic Modeling Study of 2-Methyl-2-Butene: Allylic Hydrocarbon Kinetics. Journal of Physical Chemistry A, 2015, 119, 7462-7480.	1.1	62

#	ARTICLE	IF	CITATIONS
37	Experimental and Chemical Kinetics Study of the Effects of Halon 1211 (CF <sub>2</sub> BrCl) on the Laminar Flame Speed and Ignition of Light Hydrocarbons. Journal of Physical Chemistry A, 2015, 119, 7611-7626.	1.1	12
38	Rate Determination of the CO <sub>2</sub> * Chemiluminescence Reaction CO + O + M CO <sub>2</sub> * + M. International Journal of Chemical Kinetics, 2015, 47, 50-72.	1.0	22
39	Experimental and modeling study on the high-temperature oxidation of Ammonia and related NO <sub>x</sub> chemistry. Combustion and Flame, 2015, 162, 554-570.	2.8	399
40	Numerical Study on the Effect of Real Syngas Compositions on Ignition Delay Times and Laminar Flame Speeds at Gas Turbine Conditions. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	17
41	The Effect of Impurities on Ignition Delay Times and Laminar Flame Speeds of Syngas Mixtures at Gas Turbine Conditions. , 2014, , .		3
42	Ignition delay times, laminar flame speeds, and mechanism validation for natural gas/hydrogen blends at elevated pressures. Combustion and Flame, 2014, 161, 1432-1443.	2.8	127
43	Effects of H <sub>2</sub> S addition on hydrogen ignition behind reflected shock waves: Experiments and modeling. Combustion and Flame, 2014, 161, 23-36.	2.8	33
44	Shock-tube study of the ignition of multi-component syngas mixtures with and without ammonia impurities. Proceedings of the Combustion Institute, 2013, 34, 3211-3218.	2.4	72
45	An experimental and detailed chemical kinetic modeling study of hydrogen and syngas mixture oxidation at elevated pressures. Combustion and Flame, 2013, 160, 995-1011.	2.8	589
46	Ignition Delay Time Experiments for Natural Gas/Hydrogen Blends at Elevated Pressures. , 2013, , .		4
47	Laminar Flame Speed and Ignition Delay Time Data for the Kinetic Modeling of Hydrogen and Syngas Fuel Blends. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	0.5	181
48	Numerical Study on the Effect of Real Syngas Compositions on Ignition Delay Times and Laminar Flame Speeds at Gas Turbine Conditions. , 2013, , .		2
49	Effects of N <sub>2</sub> O addition on the ignition of H <sub>2</sub> –O <sub>2</sub> mixtures: Experimental and detailed kinetic modeling study. International Journal of Hydrogen Energy, 2012, 37, 15393-15405.	3.8	53
50	Soot formation from a distillation cut of a Fischer–Tropsch diesel fuel: A shock tube study. Combustion and Flame, 2012, 159, 2192-2201.	2.8	7
51	Experimental study of soot formation from a diesel fuel surrogate in a shock tube. Combustion and Flame, 2009, 156, 1576-1586.	2.8	61
52	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.	1.2	47